

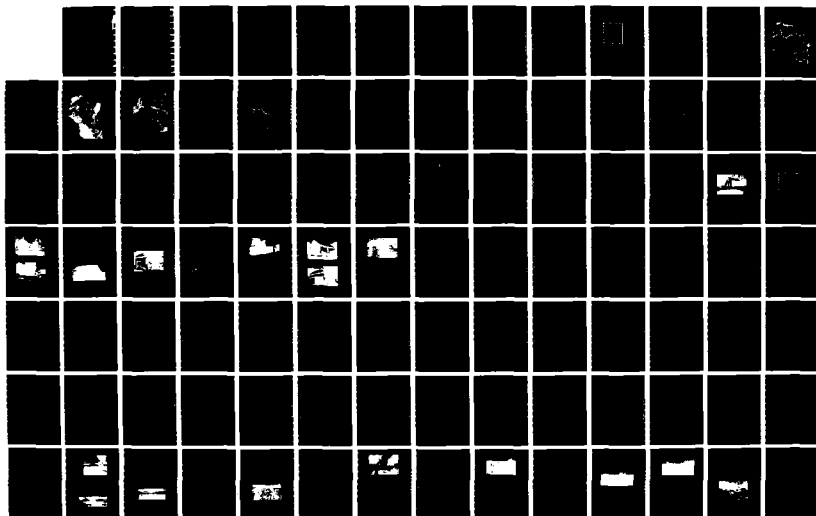
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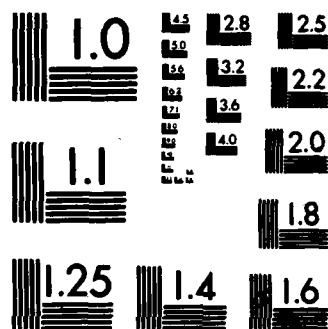
CULTURAL RESOURCES INVESTIGATION OF EAU GALLE RESERVOIR 1/2
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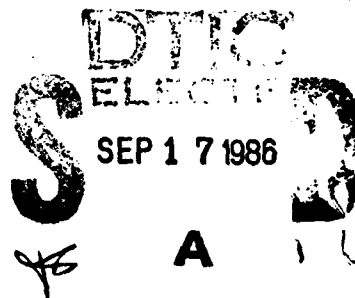
CULTURAL RESOURCES INVESTIGATION OF
EAU GALLE RESERVOIR
PIERCE AND ST. CROIX COUNTIES, WISCONSIN

Submitted To:

U.S. ARMY CORPS OF ENGINEERS
ST. PAUL DISTRICT
1135 U.S. Post Office & Custom House
St. Paul, Minnesota 55101

by
G. Joseph Hudak, Principal Investigator

Submitted: 31 December 1981
Contract No. DACW37-80-D-0045 ✓



Submitted By:

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ADMINISTRATIVE SUMMARY

Investigators were authorized by the St. Paul District, Corps of Engineers to conduct a cultural resources investigation of the Eau Galle Dam and Reservoir located in northwestern Wisconsin and straddling St. Croix and Pierce counties. This investigation consisted of a literature search and records review, and a Phase I on-the-ground reconnaissance survey.

The literature search and records review was an extensive review of the documents which contain information on known cultural resources in the Study Area. The search was conducted at the Wisconsin State Historical Society's State Historic Preservation Office, Museum of Anthropology and State Archaeologist's Office, reference library and archives; the Minnesota Historical Society's reference library and map collection; the Pierce County Historical Association, St. Croix County Historical Society, and University of Minnesota libraries.

A Phase I reconnaissance level survey was conducted on all Corps-owned land except those areas previously disturbed, approximately 250 acres, and 60 acres of land located in Section 6 T27N R15W below the spillway.

The literature search and records review were conducted between October 22, 1980 and August 25, 1981. The Phase I reconnaissance level field survey was conducted in the weeks of July 13, July 27, and August 10, 1981. The field work was accomplished employing visual, surface, and subsurface testing techniques as determined appropriate by the investigating archaeologist.

The investigators found no new prehistoric or proto-historic sites. Three standing structure sites were located on non-Corps-owned property below the spillway. No further research and no mitigative measures are recommended on these sites at this time. A variety of discrepancies in the known archaeological site records and previous investigations were discovered during the course of the present work. Consultation is recommended between the State Archaeologist's Office and State Historic Preservation Office to reconcile the known site records in the two record systems.

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I. INTRODUCTION

A. Location and Purpose of the Investigation

The St. Paul District, U.S. Army Corps of Engineers constructed the Eau Galle flood control dam and reservoir between 1965 and 1969 (Merritt 1979: 355, 367-369) on a small tributary of the Chippewa River. The dam and reservoir straddle the St. Croix County - Pierce County line in western Wisconsin above the community of Spring Valley (Figure 1). The Eau Galle Reservoir is approximately 50 miles east of the Twin Cities and 40 miles west of Eau Claire, Wisconsin.

The Study Area is covered by the following U.S.G.S. Topographical Quadrangles: Baldwin East (1974), Wilson (1974), El Paso (1974), and Spring Valley (1974) -- all 7.5' Series.

The Eau Galle Dam and Reservoir were constructed to protect the small community of Spring Valley from flood damage which occurred periodically in 1903, 1907, 1922, 1934, 1938, and 1942. The earthen-filled dam conserves a pool of approximately 150 surface acres with a shoreline of some five and one-half miles. The original planned dam size was increased at the recommendation of the U.S. Fish and Wildlife Service to provide a more adequate pool for conservation purposes. The Corps of Engineers maintains recreational facilities at the Reservoir in the form of a campground, swimming beach, shelter building, picnic area, playground, boatramp, nature trail, and two observation lookouts which attract an estimated 25,000 visitors annually (Ibid.).

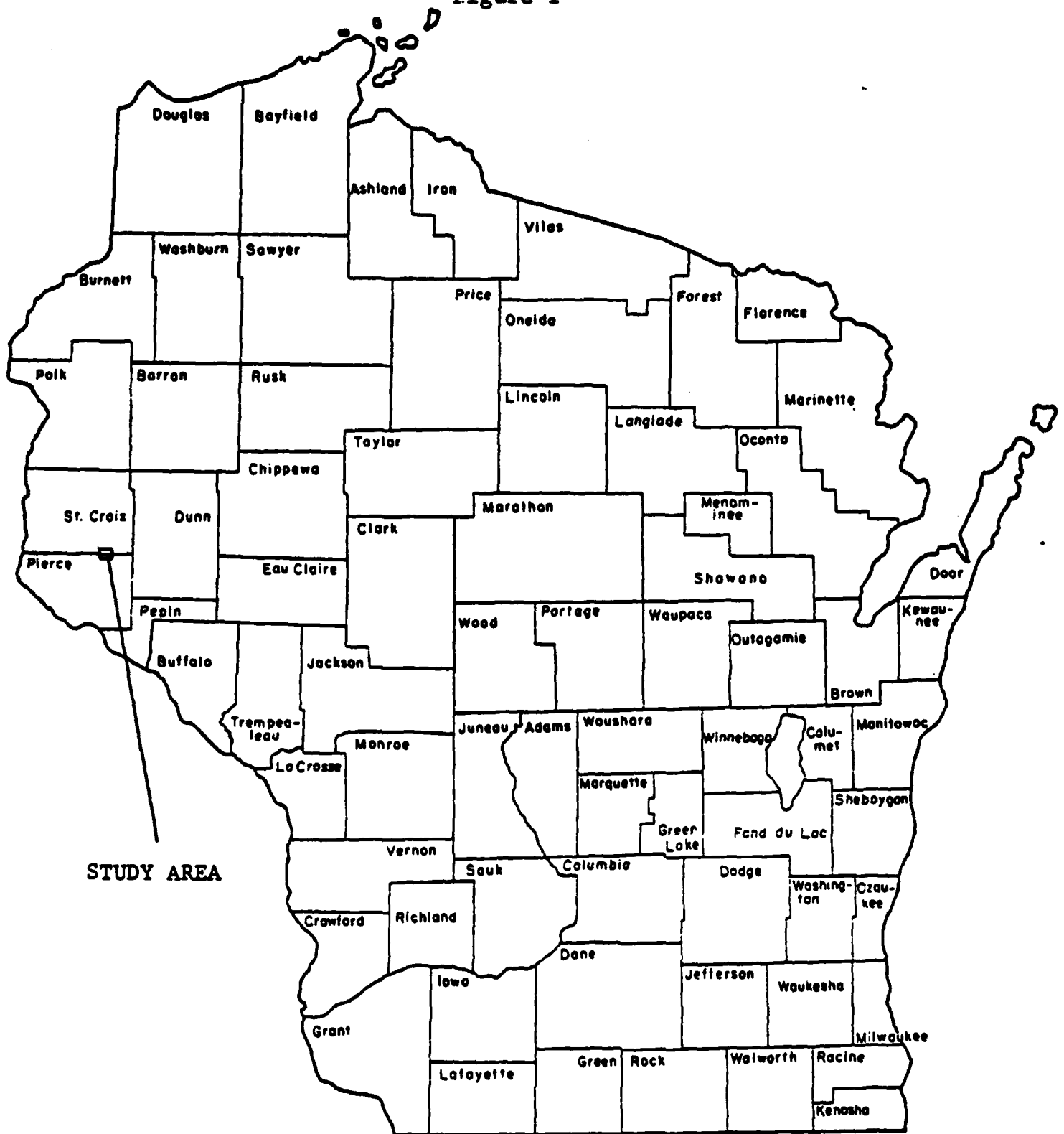
As part of its obligation to protect the cultural resources of the nation, the St. Paul District authorized a cultural resources reconnaissance inventory of Corps-owned lands in and adjacent to the Eau Galle Dam and Reservoir.

Currently, this study is not being coordinated with planning for specific Corps construction or alteration activities. This cultural resources investigation and archaeological field survey will serve the Corps of Engineers as a planning document for use in meeting its obligations to preserve and protect prehistoric and historic cultural resources. The data compiled here can help the Corps insure that its activities do not do harm to these resources. In addition, this report will serve as a scholarly reference for future investigations.

B. Description of the Investigation

The Scope of Work for this study is included in Appendix A. To summarize the Scope, the investigators were authorized to conduct

Figure 1



Vicinity Map

a literature and records search of the Study Area shown in Figure 2. The literature search and records review is an extensive review of the documents which contain information on known cultural resources in the Study Area. This effort includes the examination of published and unpublished materials and records in the State Historic Preservation Office, State Archaeologist's Office at the Wisconsin State Historical Society in Madison, and pertinent information from the Pierce County Historical Association and St. Croix Historical Society, and from local and professional informants.

A Phase I reconnaissance level field survey was conducted on the area labeled "Project Area" in Figure 2. The Project Area for Phase I testing included all Corps-owned land around the Reservoir (approximately 250 acres), with the exception of those areas that have been disturbed and 60 acres of land located in Section 6 T27N R15W below the spillway. These areas are shown in Figure 3 and, for the purposes of the Phase I testing, were divided into six Control Areas.

The literature search and records review were conducted between October 22, 1980 and August 25, 1981 using a variety of resources in Wisconsin and Minnesota. The Phase I reconnaissance level field survey was conducted in the weeks of July 13, July 27, and August 10, 1981. The field work was accomplished employing visual, surface, and subsurface testing techniques as determined necessary by the investigating archaeologist.

During the course of this investigation, no new prehistoric nor proto-historic cultural materials were located.

Figure 2

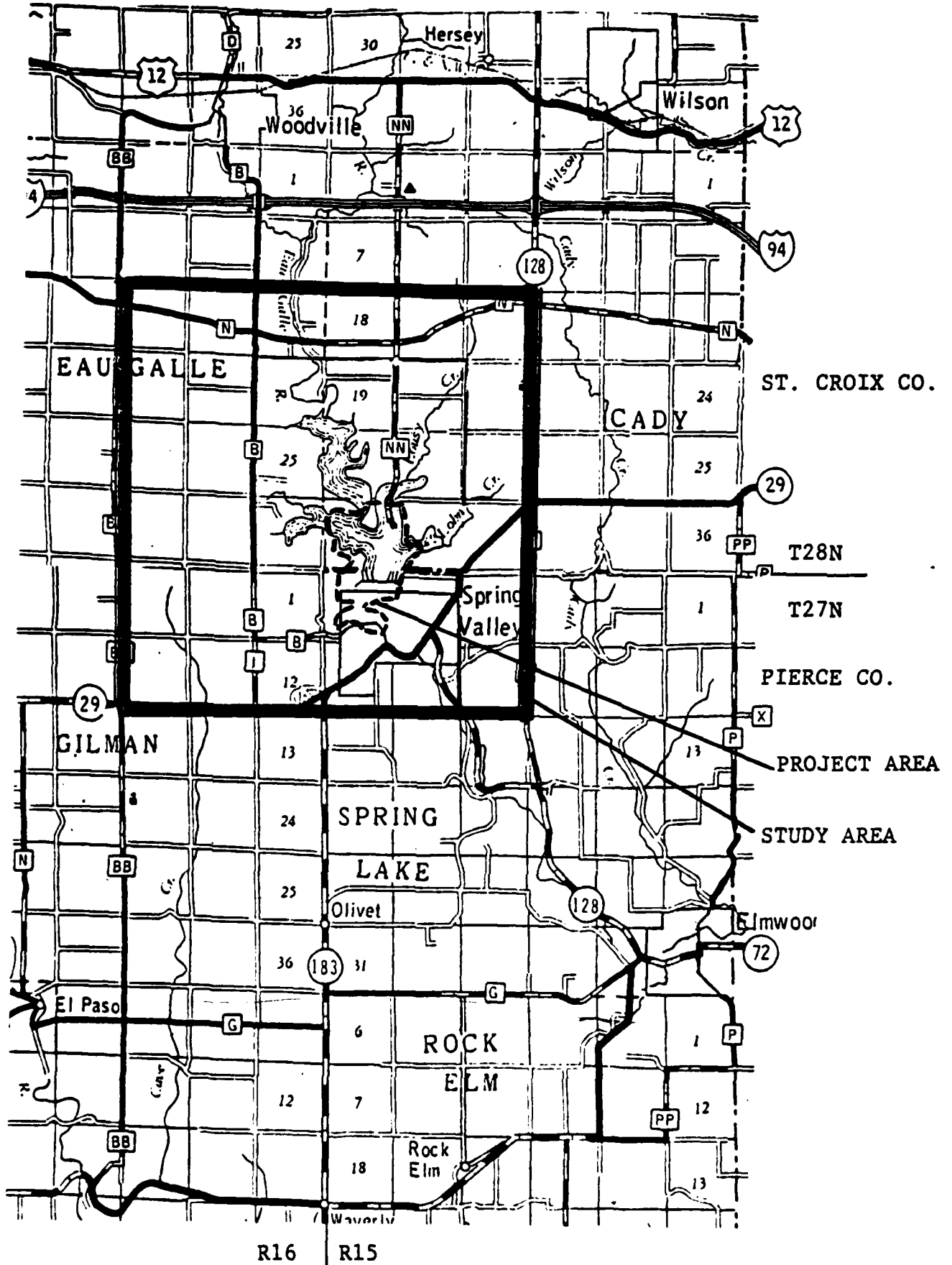
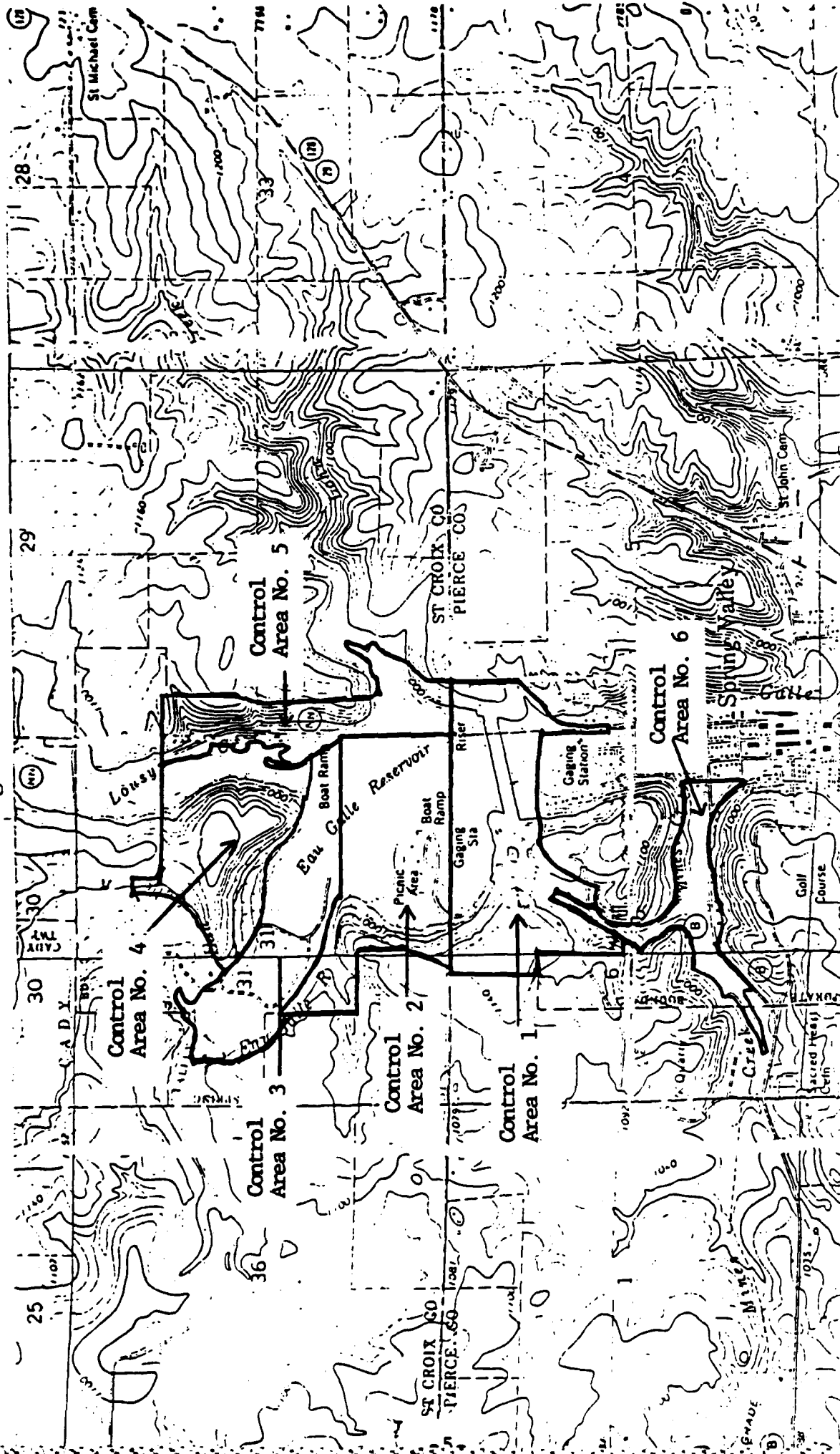


Figure 3



U.S.G.S. Quadrangle Map
Spring Valley - 7.5' Series - 1974

II. ENVIRONMENTAL SETTING

A. Geology

The bedrock of the Study Area is predominantly Upper Cambrian (St. Croixan) formations of sandstone with some dolomite and shale overlain with Ordovician dolomite of the Prairie du Chien Group (University of Wisconsin Extension 1971). These Cambrian and Ordovician period formations were formed by sedimentation during the Paleozoic Era when Wisconsin was periodically submerged beneath the sea. Sediments formed the sandstone and shale deposits found in this area of Wisconsin, while animal and plants, depositing calcium carbonate, account for the dolomite, a magnesium-rich limestone (Ibid.).

B. Physiography

Wisconsin has had several stages of glacial advances known, from oldest to most recent, as: Nebraskan, Kansan, Illinoian, and Wisconsinian. The Study Area lies in a ground moraine area just north of the "Driftless Area" (Figure 4). This is an area of older (pre-Wisconsin) drift (Curtis 1978: 27).

The Study Area is situated in the physiographic province known as the Western Uplands (Figure 5), whose northern portion was glaciated repeatedly during the Pleistocene Epoch or "Ice Age." Most of the Western Uplands is thoroughly dissected.

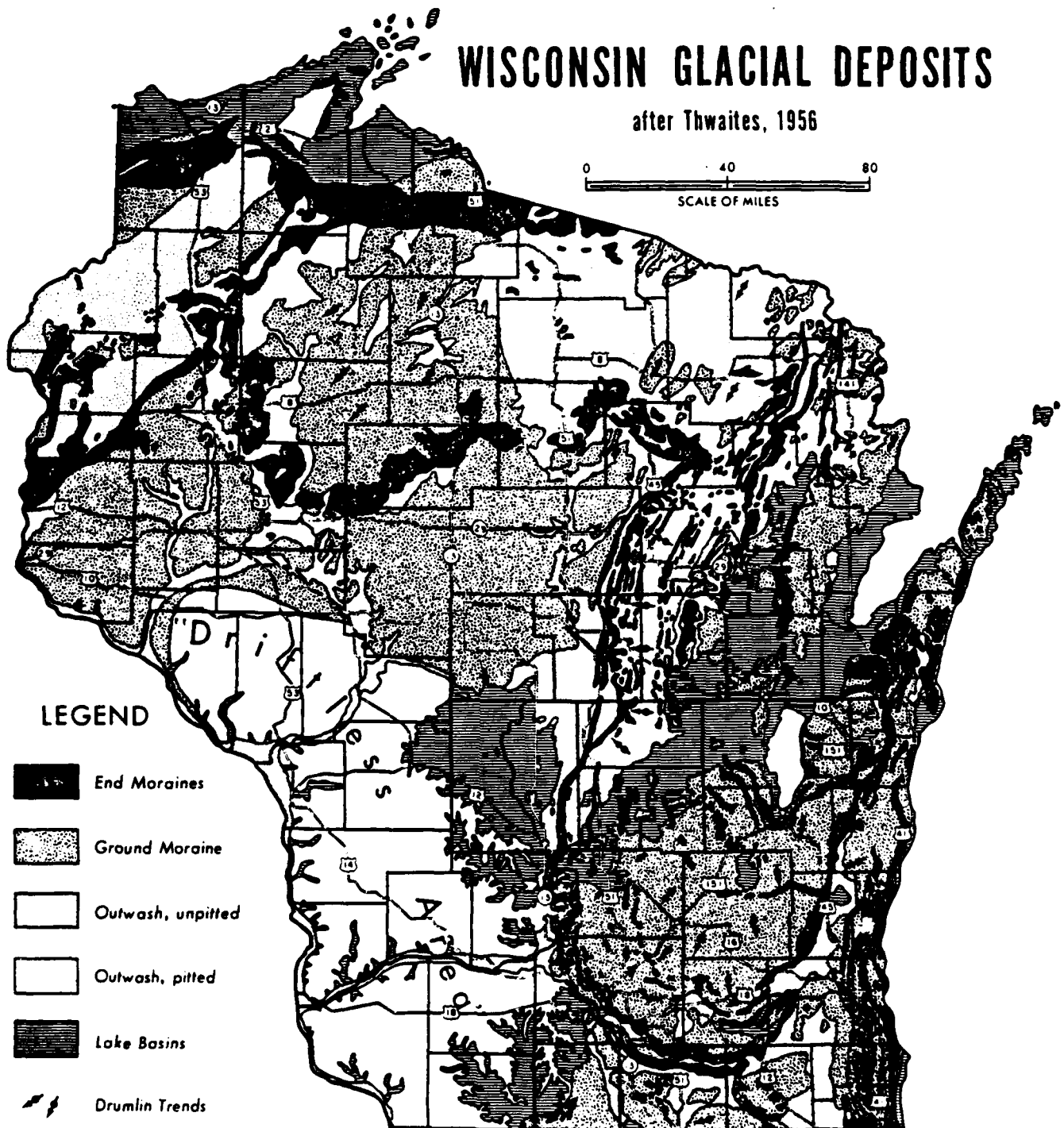
According to Martin (1965: 42), "The average elevation of the hill-tops above sea level is about 1100 feet in St. Croix and Pierce counties." The Study Area is in the southern portion of a relatively smooth glaciated upland area of the Western Uplands relative to the more deeply-dissected "Driftless Area" (Figure 6). This ground moraine area consists primarily of till plains and drumlins with thin, sometimes discontinuous drift.

C. Soils

The principal soils of the Study Area in the undulating uplands are forest, prairie, and wetland soils, including: 1) Santiago, Freeon, Frier, Milaca, and Cable silt loam and peat soils (F10 in Figure 7); 2) Spencer, Almota, Auburndale, and Adolph silt loam (F12 in Figure 7); and 3) Renova, Ostrander, Sargent, and Floyd silt loam (F13 in Figure 7). Loams and silty loams in the Eau Claire River Valley are Gale silt loam, Norden and Hixon loams, and Fayette and Seaton silt loam (D1 in Figure 7) (Hole et.al. 1968).

The F region soils are described as:

Figure 4



University of Wisconsin

Wisconsin Geological and Natural History Survey

George F. Hanson, Director and State Geologist

Figure 5

PHYSIOGRAPHIC REGIONS

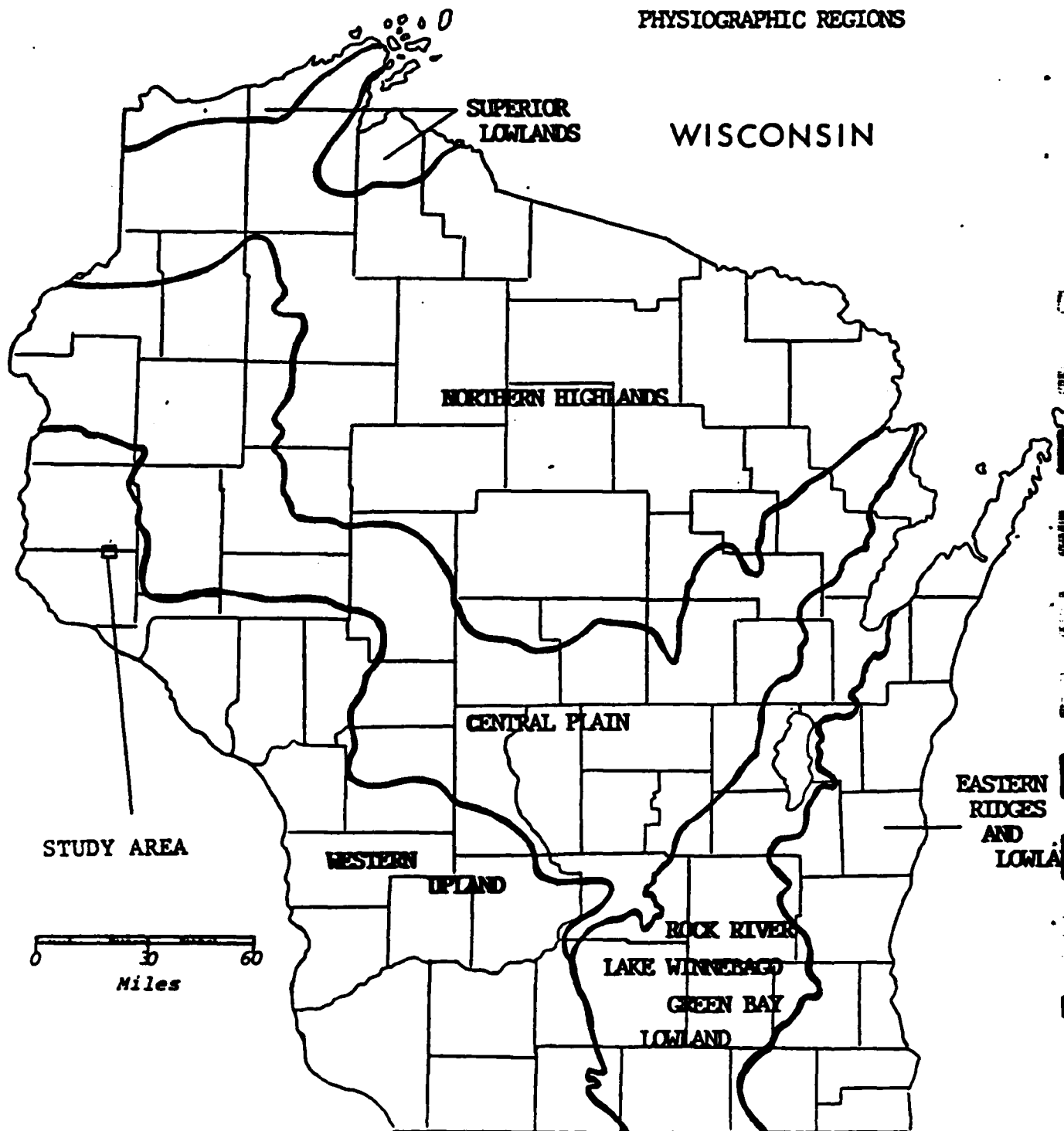
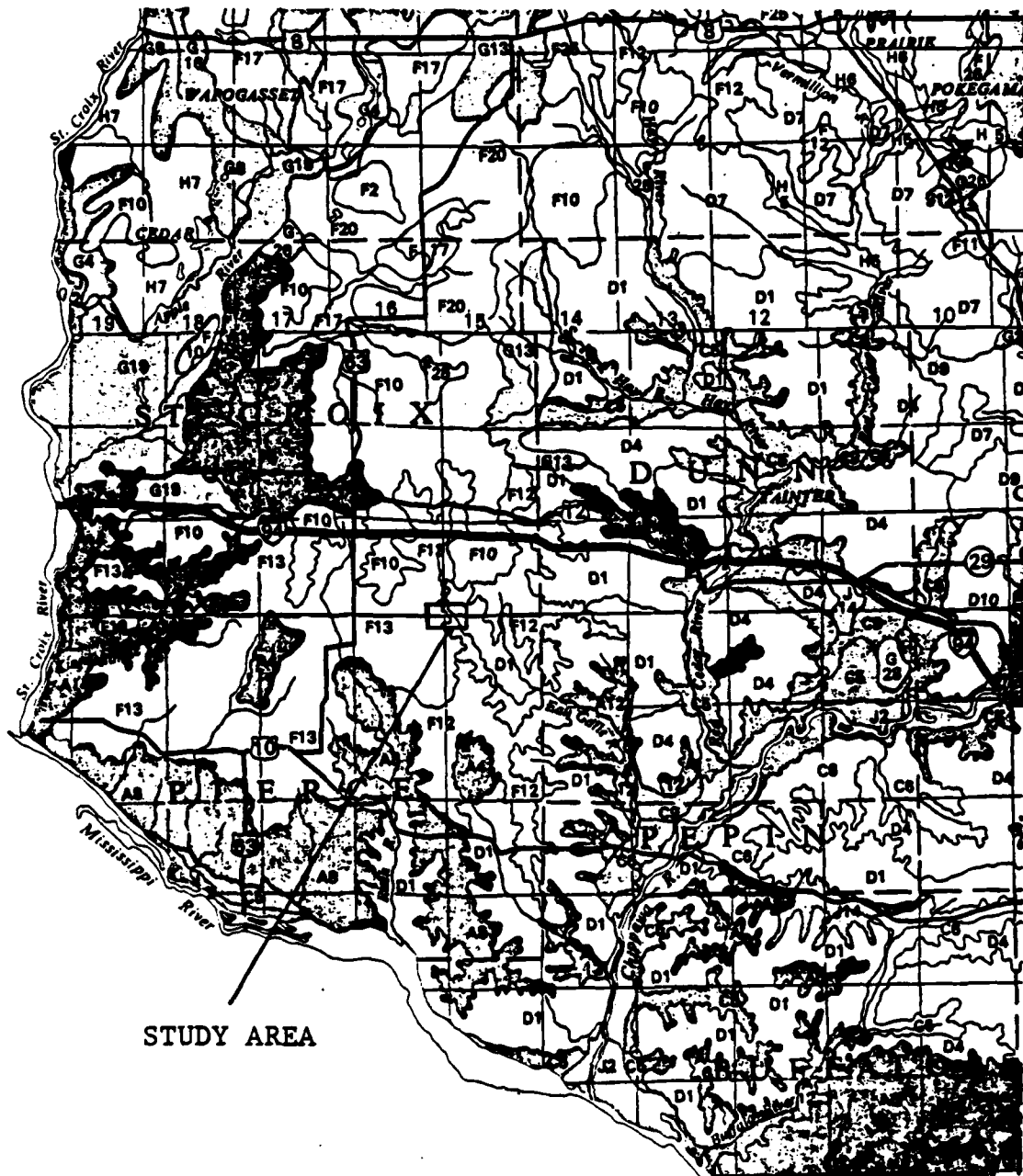


Figure 6



Figure 7



SOILS
(Hole et. al. 1968)

Soils of the northern silty uplands and plains include somewhat poorly drained silt loam (Withee) over acid, compact stony loam till and less extensive well drained soils (Santiago, Amery). Use of fertilizers and drainage practices has made these landscapes productive of forage and small grain crops. Well drained silty soils (Antigo) on plains of outwash sand and gravel are scattered over the region (Hole, et. al. 1979).

The D region soils are described as:

Soils of the western sandstone uplands, valley slopes and plains include soils developed from hard and soft (Boone) sandstone; from brown (Hixon) and green (Norden) siltstones and sandstones; and from a silty layer over sandstone (Gale). Water erosion is a serious hazard (Hole, et. al. 1979).

D. Vegetation

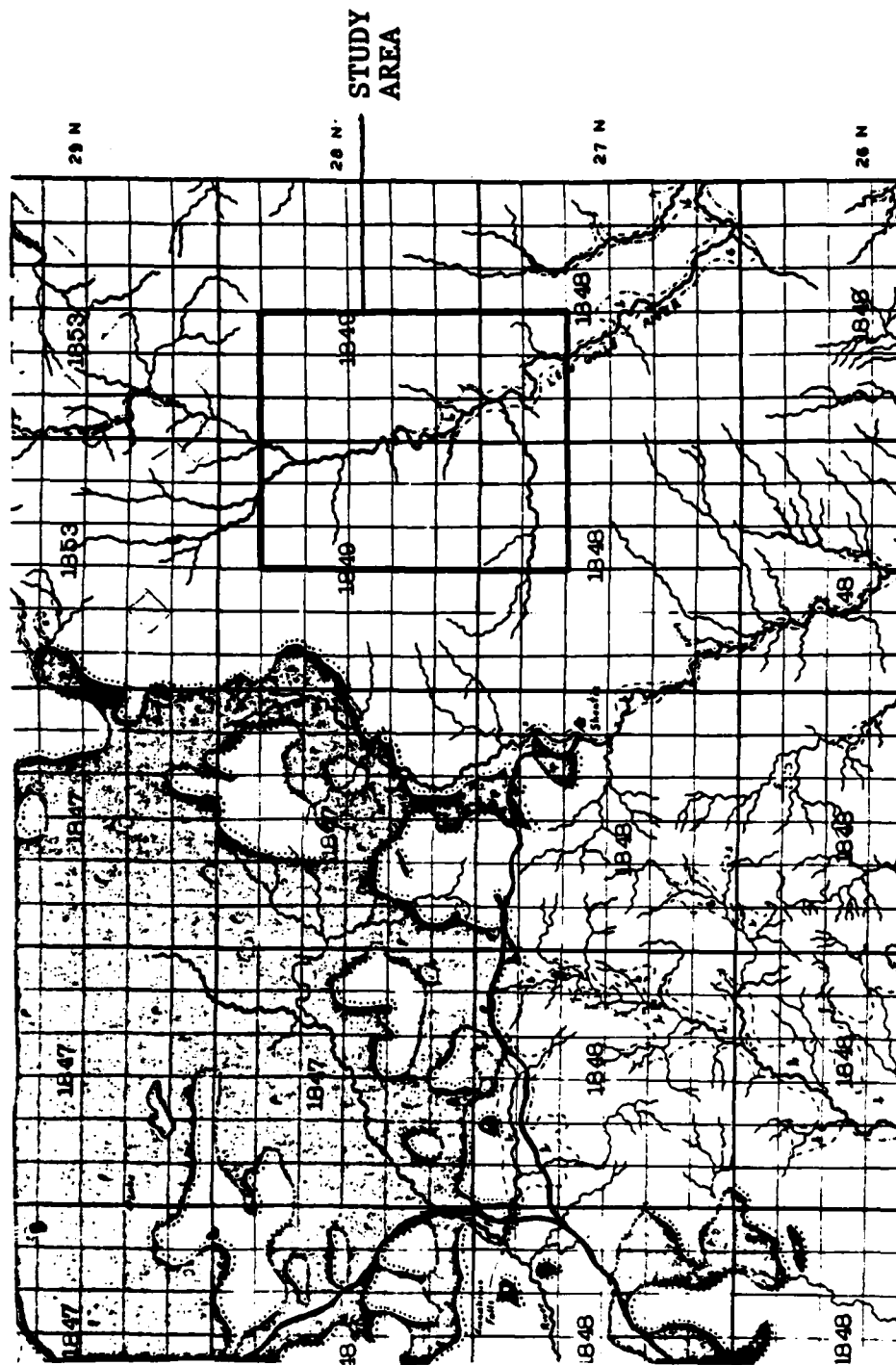
The vegetation which dominated the Study Area during the last 400 to 1000 years was recorded during the Original General Land Surveys conducted in this portion of St. Croix and Pierce Counties in 1848 and 1849. Figure 8 indicates an extensive bottomlands area along the Eau Galle River at that time. To the west (dark area in Figure 8) was a large patch of prairie, while the area to the north contained stands of white pine (light triangular areas in Figure 8).

At the time of settlement in the 1850s and 1860s, Finley (1976) indicates that the Study Area was a deciduous forest of sugar maple, basswood, red oak, white oak, and black oak. This type of forest is described by Curtis (1978:103ff) as southern mesic forest. The Study Area, furthermore, lies south of the tension zone dividing the two major ecotypes found in Wisconsin (Curtis 1978:15-23). Finley notes large patches of white and red pine in increasing numbers in the headwaters of the Eau Galle River and its sister tributaries of the Chippewa River at settlement. The presence of these nearby pineries shaped the early development of the town of Spring Valley, below the present Eau Galle dam.

E. Past Environment

During the late Pleistocene when man first expanded into North America (approximately 11,500 years ago), the continent was undergoing a gradual climatic and vegetational shift. This shift signalled the end of the extensive boreal spruce forest which had covered the upper midwest before 11,000 B.P. (Wright 1968:78). The boreal forest began to disappear during the final Valders substage between

Figure 8



Composite map of United States Land Surveyors' Plats and Field Notes, showing Study Area in 1848-1849 (from Trygg 1964, Sheet: Mn.# 7). Dark area is extensive prairie north and east of Study Area. Note bottomlands areas ("b") along the L'eau Galle River.

approximately 11,000 B.P. to 5000 B.P. (Parmalee 1968:104). The collapse of this forest happened rapidly in most of the upper midwest and reflected a drying of the climate, which, in turn, resulted in an inhospitable environment for such species of boreal trees as larch, cedar, and balsam poplar (Wright 1968: 83). Early man may also have contributed to the collapse of the boreal forest through the practice of setting fires.

Large Pleistocene mammals which had inhabited the boreal forest and parkland for thousands of years became extinct or migrated north. These large species included giant beaver, giant bison, mastodon, mammoth, musk-ox, horse, peccary, and giant ground sloth.

The relatively dry late-Pleistocene climate created local openings in the boreal forest for sedge plants, herbs, birch, and pine. This new succession occurred between approximately 10,300 B.P. to 9500 B.P. (Butzer 1964:407), and spelled the end to the life of the nomadic Big Game hunters. Throughout southern and western Wisconsin, the boreal forest gave way to mesic deciduous trees, such as sugar maple, basswood, ironwood, elm, and oak. To the south and west an oak-elm forest succeeded, while birch-aspen and, then, prairie, invaded the areas to the west in southern Minnesota (Wright 1974:10). During the period from about 9500 B.P. to 8500 B.P., the Mississippi River was the approximate boundary between two major biotic zones -- grassland on the west and deciduous forest on the east (Bryson, et. al. 1969).

By approximately 9000 B.P., the climate was essentially modern. Webb and Bryson (1972) note that pollen counts in the northern midwest dating from 9000 B.P. are similar to those today. At the same time, the mega-fauna were replaced by such animals as the black bear, fisher, martin, wolverine, lynx, snowshoe hare, porcupine, muskrat, woodland caribou, moose and deer (Cleland 1966: 20).

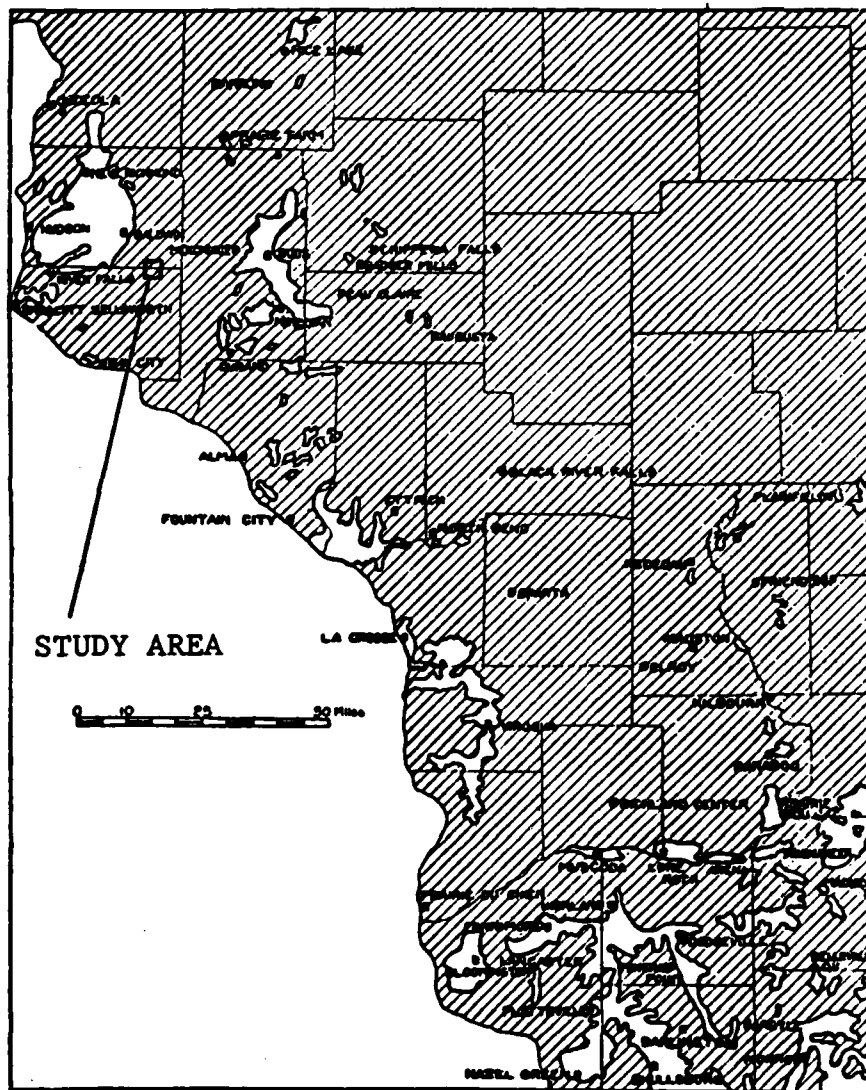
The climate began to become even warmer and dryer reaching a maximum around 8000 B.P. to 7000 B.P. (Wendland and Bryson 1974:20, Table 7). Grassland invaded from the west forming a prairie border with a transition to deciduous forests in western Wisconsin in the area of the Mississippi- St. Croix River system. Wright (1968:83) notes: "the limit of extensive prairie patches in Minnesota was probably at least 75 miles northeast of the present prairie border." Cleland (1966:20-21) is in essential agreement with Wright that the prairie expanded into southern Wisconsin between possibly 9000 B.P. and 5500 B.P. Figure 9 indicates patches of prairie to the east and west of the Study Area and along the eastern side of the Mississippi. These correspond to areas of prairie found for the most part at the time of the Original Land Surveys (see Figure 8).

A cooler and moister climatic trend began in the upper midwest around 7000 B.P. permitting for the establishment of essentially

modern vegetation for the past 4000 to 5000 years. From about 7000 B.P. to 5000 B.P., the Atlantic episode signalled a period of relatively warm and dry climate (Wendland and Bryson 1974:20, Table 7). Climatic episodes since the Atlantic are as follows: 1) the coolmoister sub-Atlantic (2700 B.P.-1680 B.P.); 2) the somewhat cool Sandic (1680 B.P.-1260 B.P.); 3) the dryer and warmer neo- Atlantic (1260 B.P.-850 B.P.); 4) the somewhat cooler Pacific (850 B.P.-400 B.P.); and 5) the neo-Boreal (400 B.P.-100 B.P.). The recent climatic amelioration is dated since about 1850 A.D. (After Wendland and Bryson 1974:20, Table 7). For most of this time, the prairie border of western and southwestern Wisconsin has supported a mosaic of prairie, deciduous forest, and patches of riverbottom forest, a rich ecological environment for fish, mammals, and fowl (Finley 1976; Marshner 1974).

The St. Croix and Pierce county area today supports a mixed farming and dairying economy with predominant crops of barley, corn, hay and oats (Collins 1972). The Study Area lies just above the area of 140 to 160 days to the average growing season in a band of 120 to 140 days (Ibid.)

Figure 9



**THE DISTRIBUTION OF PRAIRIES—SHOWN IN WHITE—IN THE
WESTERN UPLANDS OF WISCONSIN**

Courtesy of Wisconsin Geological Survey

(Schaffer 1922:15)

III. SUMMARY OF REGIONAL HISTORY AND PREHISTORY

A. Paleo-Indian

Wisconsin falls within the Eastern Woodland culture region. The earliest culture known to have inhabited the upper midwest was the nomadic Paleo-Indian or Big Game hunters. The Paleo-Indians may have made their way into Wisconsin from the south or southeast (Stoltman and Workman 1969), between 10,000 to 8,000 B.C.

The stone tool technology of the Paleo-Indian Tradition was designed to hunt grazing species of late Pleistocene mega-fauna such as the giant bison, mammoth, mastodon, giant ground sloth, and peccary. Distinctive fluted projectile points, known as Folsom and Clovis, were manufactured by Paleo-Indian hunters for use as spears. These finely-made Early Paleo-Indian points of the Folsom and Clovis variety have both been found in Wisconsin and have been dated in North America at between 9500 B.C. to 8000 B.C. (Haynes 1966; Willey 1966:44).

Although studies in southern Michigan have shown a positive correlation between fluted point distribution and mastodon remains, the only suggested association of a fluted point with mastodon remains in Wisconsin have been found in the southwestern portion of the state (Palmer and Stoltman 1976).

The unfluted point is considered diagnostic of the Late Paleo-Indian complexes. Unfluted stemmed and lanceolate points of the Paleo-Indian Tradition are widely distributed in North America. These include such types as Eden, Scottsbluff, Brown's Valley, Plainview, and Agate Basin. Unfluted lanceolate points are common in Wisconsin and show enough variation in form and finishing to suggest that local modifications developed in the Wisconsin area.

Late Paleo-Indian lithics have been found farther north than the fluted points of the Big Game hunters suggesting a northward movement of Late Paleo-Indian populations following the glacial retreats and northward moving zones of flora and fauna (Salzer 1974). Fluted points are less common the farther north one travels in Wisconsin. The Eau Galle River Valley has not yielded fluted points, although a fluted point was found at the Nater Mound site (47-Ru-3) in southwestern Rusk County near Soft Maple Creek, tributary to the Chippewa River.

Unfluted points are more common finds in northern Wisconsin, since the work of Salzer (1974) in Price, Lincoln, and Oneida counties. Salzer has identified several Late Paleo-Indian Phases in this region of the state. The Flambeau Phase sites, associated with a lacustrine setting, have produced Agate Basin points in association with bifaces, scrapers, gravers, cores, and wedges. Salzer (1974)

assumes a date of about 7000 B.C. for the Flambeau Phase, at a time of the Valdres glacial retreat. Minocqua Phase sites, found in lacustrine settings in Lincoln and Oneida counties, may have been workshops or temporary camps. The lithic assemblage includes a variant of the Scottsbluff point, side and end scrapers, bifaces, knives, cores, and wedges. Salzer has tentatively dated the Minocqua Phase at between 6000 to 5000 B.C.

Very little is known about these late Paleo-Indian Phases in northern Wisconsin. At present, there is no evidence to suggest Paleo-Indian occupation in the Eau Galle River Valley (Brandon 1968:30).

B. Archaic

The Archaic Tradition is defined around combinations of time, subsistence patterns, and technology. Griffin (1952) suggested division of the Eastern Archaic into Early, Middle, and Late Periods. The Archaic patterns persisted in Wisconsin between approximately 8500 B.C. to 100 B.C. Early Archaic is least well understood. Fitting (1970) believes that Paleo-Indian and Archaic populations may have existed during the same period of time in the Upper Great Lakes. The lithic technology of the two traditions is sufficiently dissimilar to suggest a theory of abandonment of Wisconsin by Paleo-Indians and a replacement by Archaic populations. The crudely manufactured Archaic tool kit does not argue for a gradual transition from Paleo-Indian to Archaic.

The origins of Archaic lifeways are still a matter of debate among archaeologists. Paleo-Indian and Archaic lithic technologies, however, differ in important respects. Archaic lithics are marked by a predominance of notched, stemmed, and shouldered projectile points unlike the earlier Paleo-Indian points. Archaic points, in general, are smaller, less lanceolate, more crudely chipped, and show more regional variation in their form and manufacture. Osceola, Raddatz, Oconto, and Madison Side-notched are some of the more common type names for Archaic points found in Wisconsin. Raddatz Side-notched points, for example, are fairly large, lanceolate in shape, and usually manufactured from local chert from the limestone of the Driftless Area (Wittry 1959a).

The Early Archaic is the most poorly understood of this Tradition, and differs least from Late Paleo-Indian. The basic cultural shift to Archaic was a response, in part, to a changing environment. Around 7500 B.C. the climate began to become warmer and dryer. By 5000 B.C., Wisconsin had a mixed conifer-hardwood forest with patches of grassland, such as that found in the early historic period by Euro-Americans. Along with changes in vegetation and climate went changes in animal populations. New environments called for new cultural adaptations. The Archaic Tradition is

defined by the introduction of a hunting, fishing, gathering economy adapted to a rich deciduous forest-riverine environment.

Although primarily hunters, Archaic populations seem to have adapted to the seasonal and regional migrations of such animals as elk and deer. Their exploitative pattern may have included spring fishing camps and winter hunting camps in the forested interiors.

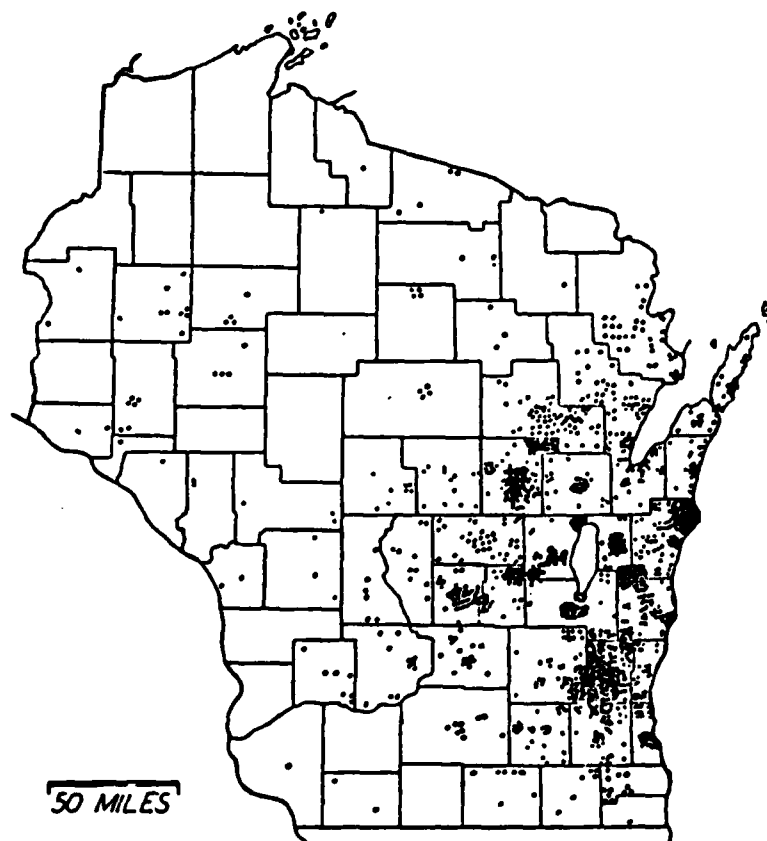
Middle Archaic populations, during the period from about 5000 B.C. to 3000 B.C. appear to have exploited diverse food resources. New exploitative practices may have allowed for longer occupation at some sites and somewhat larger populations. Plant resources appear to have become important; in particular, local plants, nuts, berries, seeds, and roots. Shellfish, fish, and mammals were part of the Archaic diet (Cleland 1966). It is clear that Archaic populations exploited both riverine and lacustrine environments. The lithic assemblage of Middle Archaic populations included certain innovations such as grinding, pecking, and polishing of such tools as stone axes, adzes, gouges, and grinding stones. The presence of such tools suggests a more intensive use of the environment.

The Raddatz Rockshelter in Sauk County is an important stratified occupation site from the Archaic period to have been excavated (Wittry 1959a). This rockshelter produced chipped and ground lithics which have been assigned to the Middle Archaic. Lithic tools included Raddatz Side-notched and straight stemmed points, symmetrical ovate knives, side scrapers, and T-shaped drills. The Raddatz Side-notched point is characteristic of the Archaic Tradition in the central and northern Mississippi River Valley. Along with the Madison Side-notched point (Baerreis 1953), the Raddatz Side-notched has been attributed to the Archaic and Early Woodland periods in Wisconsin (Brandon 1968:8).

In addition to the Archaic projectile points mentioned earlier, the Durst Stemmed is attributed to the Late Archaic-Early Woodland horizon. Wittry (1959b) defined Durst Stemmed points as lanceolate in shape and manufactured by the removal of long shallow notches from the corners of the blank. Durst Stemmed points have expanding stems and rounded shoulders with a gently rounded base. Sometimes the base is formed by a flat surface. Durst Stemmed points are similar to Woodland points known as Monona Stemmed.

Although the full flowering of the Archaic Tradition in Wisconsin occurred with the Old Copper culture, Old Copper artifacts have not been located in the Eau Galle River Valley Study Area. The Study Area in northwestern Wisconsin is west of the major concentration of Old Copper finds in the eastern portion of the state. As Figure 10 demonstrates, Old Copper finds should not be ruled out in the Study Area, although none are known at this time.

Figure 10



Total distribution in Wisconsin of the Old Copper artifacts in the collection of the Museum of the State Historical Society, Madison; The Neville Public Museum, Green Bay; and the Public Museum of the City of Milwaukee.

(Wittry 1957)

The Eau Galle Study Area has been the subject of several previous archaeological investigations. An initial archaeological reconnaissance of the reservoir area was undertaken in 1962 directed by A. Dewey Buck. Buck located 15 archaeological sites. In 1964, Hank Kerr located an additional ten sites, two partially excavated and three tested under a National Park Service contract. Again, in 1966, the National Park Service awarded a contract to the State Historical Society of Wisconsin for intensive investigation of several sites within the reservoir. The Lamb-5 site (47-Sc-25), partially excavated by Kerr in 1964, was chosen as the most promising site to excavate. The work was carried out under the joint direction of Dr. Joan E. Freeman and Jay Brandon, both of the State Historical Society (see Brandon 1968). Figure 11 illustrates the location of known sites identified during the 1960s.

The Lamb-5 site (47-Sc-25) has received the most intensive investigation in the Study Area. The site is situated on the first and second major terraces of the Eau Galle River in T28N R15W SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31. In 1964, Kerr located nine features. Four additional features were located by Brandon and Freeman in 1968. These consist of shallow pits which evidence "combustion" (Brandon 1968:19). Lithics at the site include projectile points, worked flakes, knives, scrapers, and implement fragments. Non-lithic finds include bone fragments, deer teeth, a portion of a deer mandible, and charcoal (Brandon 1968:8-21). These features from Lamb-5 were determined to belong to a pre-ceramic Archaic component at the site.

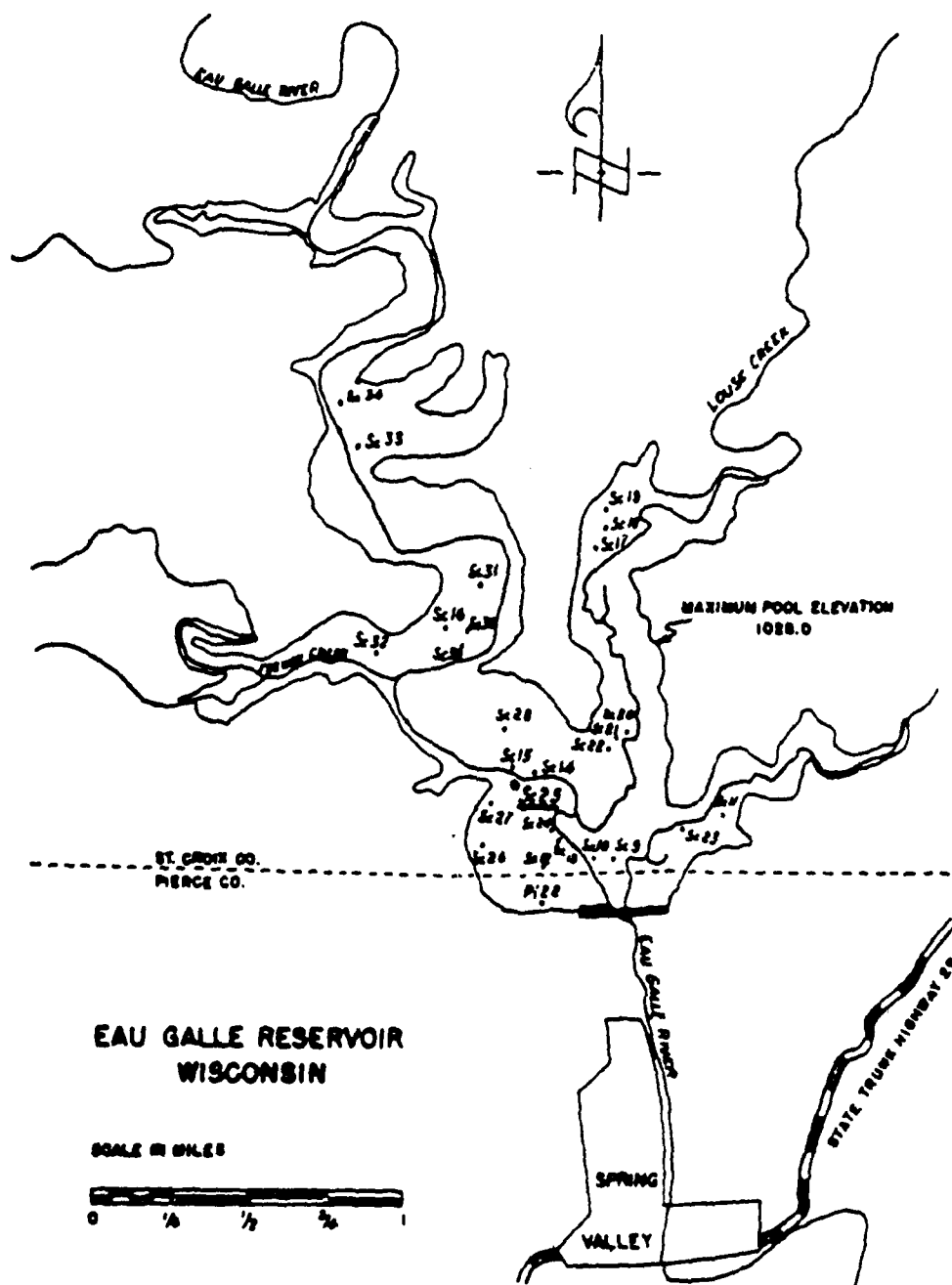
Both Kerr (1965:34) and Brandon (1968:30) interpreted an Archaic component at the Lamb-5 site. Kerr (1965:34) concluded:
that occupations of this site were pre-ceramic, limited to Middle or Late Archaic periods. The artifact inventory as a whole, while not large, is relatively pure in that it does not include any materials which are obviously extraneous to the Archaic horizon.

Kerr and Brandon based assignment to the Archaic on the presence of certain projectile points discovered in the course of their investigations. Lamb-5 yielded three side-notched points. One of these fit

well into the side-notched tradition in Wisconsin, and is closely similar to the Raddatz (Wittry 1959a:44-45) and Madison (Baerreis 1953:154) side-notched types which have been attributed to the Archaic and Early Woodland stages of Wisconsin (Brandon 1968:8).

Another crudely manufactured side-notched point appeared to

Figure 11



Known Sites in the Eau Galle Study Area
(Brandon 1968:2)

Brandon (1968:10) "to relate to the Raddatz and Madison side-notched types," as did the third point of this type found at the site.

In addition, three complete expanding stem points were excavated at Lamb-5. These

specimens recovered from Lamb-5 bear strong similarities to the Durst Stemmed type which has been described for Wisconsin (Wittry 1959b: 179) in all respects except size with the former being larger. Personal inspection of the Durst Stemmed collection from the type site (47-Sk-2) suggests that incomplete specimens of size comparable to the Lamb-5 specimens have been included in the type collection. These are greatly in the minority and are only represented by basal fragments. It appears safe, however, to assume that both the expanding stem points from Lamb-5 and the Durst Stemmed points found in other sites belong to the same tradition of manufacture, and probably occupy the same time span, i.e. Late Archaic-Early Woodland (Brandon 1968:10-11).

Lamb-5 yielded four corner notched specimens, which, according to Brandon (1968:11),

are rather thick in proportion to their size but are of fairly good workmanship. All show pressure retouching along blade and basal edges. In the two complete specimens stem length is short in comparison to overall length and base width is less than shoulder width. Base form is convex. It is interesting to note that one of these specimens is made of red chert similar to that described by Cooper (1933:69) as occurring above the catlinite beds in Barron and Rusk Counties. Points of this material were also found at the Durst Rockshelter in Sauk County (Wittry 1959b: 180).

In some characteristics these corner notched points resemble certain Durst Rockshelter specimens which have been classified as Monona Stemmed (Wittry 1959b:180). However, neither the formal nor metrical characteristics of the Lamb-5 points correspond sufficiently to either Wittry's (ibid) (sic), nor Baerreis' (1953:10) descriptions of Monona Stemmed to allow their inclusion in this type.

Brandon (1968:30) concurs, in essence with Kerr, concluding:

Since the majority of the points recovered at the site are related to the Late Archaic types known for Wisconsin, I suggest that the Lamb-5 site represents a series of short-lived Late Archaic occupations by small groups, which occurred over a relatively short time interval. The site was probably used as a hunting station or transient camp where the manufacture of stone implements was carried on to a small degree.

C. Woodland

The Woodland Tradition is usually divided into Early, Middle, and Late in Wisconsin. For almost 2500 years, Woodland cultures flourished in the Eastern United States, developing in areas of North America around 1000 B.C. and persisting into early historic (seventeenth century) times.

Burial in earthen mounds and the introduction of pottery are traditional benchmarks of the Woodland cultures. However, the contrast between Late Archaic and Early Woodland has become less distinct as archaeologists study prehistoric sites from this culture period. Ceremonialism in burial practices, particularly in mounds, seems to have become well established in Late Archaic cultures in Wisconsin.

Pottery made its appearance in southern Wisconsin and the upper midwest around 1000 B.C. in the form of a thick-walled cord-marked ceramic type known as Marion Thick and Dane Incised. The appearance of pottery is believed to have spread north and east into the state by way of the Ohio and lower Mississippi river valleys. At the same time, however, a trend toward intensive local cultural regionalization continued to evolve. The introduction of cultivated plants, which added to an already broad spectrum of exploited food sources such as fish, game, and wild rice, was a significant Woodland innovation (Black 1963; Yarnell 1964).

The introduction of pottery, burial in earthen mounds, and the increasing use of agriculture marks the Woodland cultures. These three Woodland traits are not found simultaneously in all parts of the upper midwest. Known Early Woodland sites in Wisconsin are few, and are found mostly in the southern half of the state where most archaeological work has been carried out. Both pottery and elaborate burial mounds may not have reached the northern interior of Wisconsin until Middle or Late Woodland times. In northern Wisconsin, Boreal Archaic populations may have persisted simultaneously with Early Woodland peoples.

Evidence from projectile points is inconclusive in defining the

advent of Early Woodland in the state. Late Archaic Osceola, Raddatz, and Durst-Stemmed points, for example, have been found at sites containing Late Archaic through Middle Woodland components. These point types are a "tenuous horizon marker" between the Late Archaic and Early Woodland stages (Geier and Loftus 1976:98).

In northern Wisconsin, Salzer (1974) has identified an Early to Middle Woodland cultural horizon from sites in Vilas, Price, and Oneida counties which he calls the Nokomis Phase. Nokomis Phase sites have been tentatively dated at about the first two centuries A.D. or slightly earlier, according to Salzer. In this area of Wisconsin, pottery seems to have made its initial appearance with small, crude thick-walled vessels known as Nokomis Trilled made of sandy clays tempered with crushed granitic rock. Decoration usually consists of finger-trilled lines over cord marked surfaces (Ibid.). Nokomis Phase sites are not yet known in the St. Croix-Pierce county area. nor has this area recieved much attention from archaeologists searching for Early Woodland sites.

Increasing regionalization marks the Middle Woodland stage, bracketed by the dates 100 B.C. to 400-500 A.D. Middle Woodland ceramic and lithic styles in Wisconsin were stimulated by the Havana Tradition in Illinois. The Middle Woodland period in Wisconsin is characterized by "regional archaeological complexes with incompletely shared cultural roots" (Mason 1968:3). Struever (1961:2) has noted that "artifact styles diagnostic of the Havana Tradition extend ... as far north as the Red Cedar River in Wisconsin."

However, there is at present no evidence of Havanoid or Hopewell occupation of the Eau Galle River Valley. In western Wisconsin, these southern traditions, which practiced agriculture in Illinois, do not seem to occur with any frequency north of a line marking the 160-day frost free season. The Eau Galle River Valley falls into the 120-140 day growing season. Habitation sites, as well, seem to occur on floodplains of major river valleys and near shallow backwaters, for example, in the Mississippi River Valley and lower Wisconsin River. One reason why the Hopewell pattern may not have firmly established itself in the Upper Mississippi Valley is offered by Benn (1979:59) who suggests that this environmentally rich and varied region offered "a plethora of alternatives for the hunting and collecting Havana peoples." Based on work in Dunn County east of the Eau Galle Study Area, Cooper (1933) posited the Red Cedar "variant" of Hopewell in northwestern Wisconsin, but little work has been done on this possible northern manifestation of the Hopewell culture since the 1930s.

The Late Woodland period, dating from approximately 400 A.D. to 1650 A.D., was a time of dynamic cultural diversity and activity in Wisconsin. Late Woodland sites in the state are generally larger and more numerous suggesting greater population density. Marked

changes in burial practices included the construction of conical, linear, and tapering forms of mounds. Burial modes exhibited greater variety including burial in ossuaries, cemeteries, and mounds, as well as bundle, flexed, extended, and cremated methods of burial.

The Late Woodland period in the area of older drift in northwestern Wisconsin is not well known. Several known Late Woodland phases in eastern Minnesota and northern Wisconsin occur in the lake-forest settings which bear little resemblance to the Study Area. The St. Croix Phase, transitional between Middle and Late Woodland, occurs from the northwestern corner of Wisconsin (Altern site in Burnett County) across eastern and central Minnesota into the Red River Valley (Gibbon and Caine 1980:61). Known St. Croix Phase sites exhibit a great deal of variation in their location, but most sites appear to be located in the lakes district of central Minnesota and extreme northwestern Wisconsin adjacent to lakes known today "for their excellent wild rice harvests, fishing, and waterfowl hunting" (Ibid.).

To the east of the Study Area, Salzer (1974) identified another Late Woodland culture which he named Lakes Phase, known from sites in Oneida, Iron, and Vilas counties. Salzer has dated this Woodland phase from about 600 or 700 A.D. to about 1400 A.D. Lakes Phase sites show variation in size, but eighty per cent of the known sites are located around lakes, on eastern lake shores, near lake outlets, on lake peninsulas, and on islands. Site preference only rarely occurs near rapids or at the junction of two streams. Predominant lithic material is quartz and projectile points show great variety, but are generally small triangular in form.

The Clam River Phase in Burnett County (and possibly extending into adjacent Douglas, Washburn, and Sawyer counties and the St. Croix River basin of northwestern Wisconsin and eastern Minnesota) shares ceramic similarities with Minnesota Kathio wares. Vessels are generally globular with constricted necks and are cord-stamped, cord-wrapped, twisted cord marked, and grit tempered. Small triangular projectile points were probably used in hunting with bow and arrow. Clam River appears to be roughly contemporaneous with Lakes Phase, but probably lasted into the late eighteenth century (Cooper 1964). There is some evidence that both the Lakes Phase and Clam River Phase may have represented ancestors of the historic Dakota or Siouan groups which later controlled northwestern Wisconsin and Minnesota (Ossenberg 1974; see also Caine 1969, 1974).

These Late Woodland phases are not known in the vicinity of the Eau Galle Study Area. The appearance of small triangular projectile points probably marked a shift from the atlatl to the bow and arrow. Cleland (1966) has posited a shift to a more focal subsistence

pattern during the Late Woodland stage with increasing emphasis on the exploitation of wild rice in the lake forest areas of the Upper Great Lakes. In northern Minnesota, wild rice may not have spread throughout the lakes region until 600 A.D. to 800 A.D. (McAndrews 1969). With the use of the bow and arrow may have come an increasing concentration on hunting a few large or abundant food animals such as deer (Gibbon and Caine 1980:64).

The indigenous Effigy Mound tradition is by far the most visible Late Woodland manifestation in Wisconsin (Hurley 1975). Only a few effigy mounds are found in the adjoining states of Minnesota, Iowa, and Illinois. Until recently Effigy Mound was thought to be only a burial complex. The effigy mounds, for which this culture is named, are low earthen mounds of up to several hundred feet in length. They are found in various animal and bird shapes, including bear, long-tailed panther, turtle, bird, lizard, and canine forms, as well as conical and linear shapes. Burial mode is flexed, bundle, and cremation with burial offerings uncommon.

Surprisingly little is known about the origin, culture, and settlement patterns of the Effigy Mound peoples. Archaeologists have found it difficult to associate habitation sites with the effigy mounds. Hurley (1965:3) has suggested a rough coincidence with the prairie-forest province in southern Wisconsin when examining Effigy Mound distribution in Wisconsin.

The Lamb-5 site contained a small post-Archaic component, artifacts of which were recovered from the extreme western end of the site. Brandon (1968:25) based his identification of the post-Archaic component on a miniature pottery vessel and associated triangular projectile point. Another triangular point was found on the ground surface at Lamb-5. Exterior and interior surfaces of the pot were smoothed. The rim of this pot is flared with a flattened lip. The only decoration occurs where the rim joins the vessel wall -- at which point a decorative band occurs composed of "slightly oblique fingernail impressions" (Brandon 1968:26). The pot is non-diagnostic, but in association with a small triangular projectile point, Brandon believes that the "earliest possible affiliation is with the Effigy Mound cultures" (*Ibid.*). Brandon suggests that the Woodland component at Lamb-5 may date sometime around the eighth century A.D. or later. He explains: "...since triangular projectile points remained in vogue into historic times, the post-Archaic component may be of considerable less antiquity..." (Brandon 1968:27).

The other piece of ceramic found in the Eau Galle Study Area was recovered by Buck and Thygesen (1962:1) at the Larson II site (47-Sc-10). It was a non-diagnostic grit-tempered cord-roughened body sherd. Although Buck and Thygesen (1962:n.p.) recommended "extensive excavation" at this site, this was never carried out. Larson II may have had a small Woodland component based on the pottery found there.

D. Mississippian

The Mississippian Tradition seems to have developed in the Upper Mississippi Valley after 800 A.D. lasting until perhaps 1650 A.D., or early historic times. During this time, small groups of horticulturalists became established in semi-permanent villages along the Upper Mississippi River and its tributaries. In the Upper Great Lakes corn may have appeared before 100 A. D. and subsequently spread into Wisconsin at a later date. Eastern Complex corn may not have developed until around 1000 A.D. in the Upper Mississippi River Valley and Michigan region (Yarnell 1964).

In western Wisconsin, Gibbon (1969) has suggested that the Oneota Mississippian manifestations along the Mississippi River and major tributaries may have been basically Woodland, acculturated to a Mississippian pattern which involved new ceramic styles, significant agriculture, and other socio-economic changes. From the large agricultural settlement at Cahokia in southwestern Illinois on the Kaskaskia River, an extensive trade network radiated throughout the Mississippi River bottomlands into the hinterland of the upper midwest between 1100 A.D. to 1300 A.D. During this time, the Red Wing-Diamond Bluff villages in southeastern Minnesota and western Wisconsin may have served as a Cahokian outpost in the Upper Mississippi Valley (Gibbon 1974).

The Sheffield site on the St. Croix floodplain in Washington County, Minnesota west of the Study Area is believed to have been an Oneota summer hunting-fishing base camp similar to Blue Earth phase sites to the south and west. The Mississippian component at Sheffield has been radiocarbon dated at A.D. 1000 plus or minus 180 (I-784) (Gibbon 1973). Such Oneota agricultural outposts are unlikely in western Wisconsin in the interior on minor tributaries such as the Eau Galle River, and none are known in the Study Area.

E. Protohistory

Very little is known of the Eau Galle River Study Area during the period of indirect contact between Indians and Euro-Americans before Jean Nicolet stepped ashore at Green Bay in 1634. From the time of settlement on the east coast of America to the time of Indian cessions in the Upper Mississippi Valley, there was a general westward movement of tribes. In the 1630s the Iroquois, having been displaced to the east, drove the Hurons, Petuns, Ottawa, and perhaps other Algonquin tribes into the area of Wisconsin. The Hurons and Ottawa squatted on traditional Dakota or Sioux territory in northern Wisconsin (Hyde 1962:128-134), only to be driven out by the Dakota around 1670. Chippewa moving south and west around Lake Superior routed the Dakota, in turn, between 1730 and 1780 (Quimby 1960: 109).

The seventeenth and eighteenth centuries was a time of great movement for Indians in the Upper Great Lakes. French rule from 1634 to 1763, was followed by British control from 1763 to 1815. When the French established the first Sioux trading post at Lake Pepin (1685- ca. 1691), the Eastern (Santee) Sioux of the Mdewakanton division had village settlements in northcentral Minnesota (Hickerson 1974:208). Until approximately 1750, the Santee Sioux hunted as far south as the Wisconsin River, but their villages remained in northcentral Minnesota or along the Minnesota River. By 1760, however, the Sioux hold on the Rum River region had weakened because of the south and westward advance of the Chippewa. According to Hickerson (1974:209), a chronicler of LeSueur's trading expedition in 1700 described the Chippewa River, of which the Eau Galle is a western tributary, as "a war road between the Sioux and Fox, and impossible to enter in safety" (Ibid.).

Sioux-Chippewa hostilities made the area around the bank of the St. Croix River hazardous for Sioux occupancy, although both tribes probably hunted in western Wisconsin. Carver had written in 1766-1767 that "the whole region between Black River and the St. Croix River was unoccupied, and that the Chippewa-Red Cedar River region was a Sioux-Chippewa war road, uninhabited by members of either tribe" (Hickerson 1974:210).

Gibbon has speculated that the deciduous forest of western Wisconsin may have acted as a buffer zone between contending groups of Indians in the region. The deciduous zone, including the Eau Galle Study Area, was,

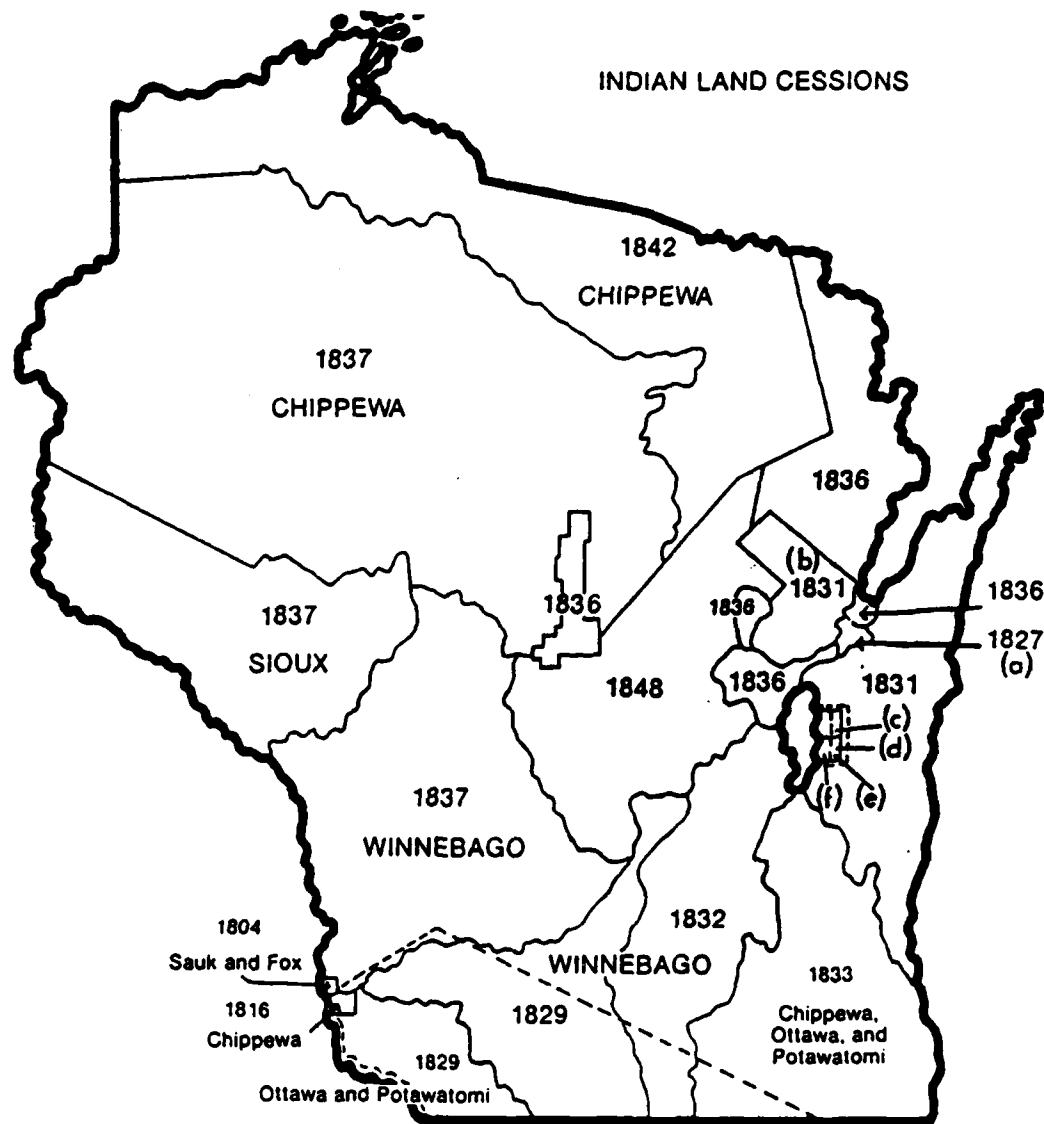
...practically empty of Indian villages as the Chippewa in the coniferous forests and the Dakota in the grasslands fought for the right to exploit the large numbers of game concentrated there (Gibbon 1973:22).

F. Historic

Euro-American settlement in the Study Area came rapidly when the Americans gained control of the Upper Mississippi River Valley in 1815, following the War of 1812. The Sioux ceded their rights to the Study Area and surrounding region in 1837 (Figure 12), a year after Wisconsin Territory was organized.

The Study Area began to be settled shortly after statehood in 1848. During this year and the next, the Study Area was surveyed by the U.S. Government (Figure 8). The town of Prescott in southwestern Pierce County was claimed by Philander Prescott and other U.S. Army officers stationed at Ft. Snelling in 1827 (Easton 1909:485). Initially, their legal position was that of squatters. Until 1853, Pierce County was part of a larger St. Croix County which included present-day Polk County. In 1853, as population density increased,

Figure 12



KEY TO MAP OF INDIAN LAND CESSIONS



Menominee

----- Broken lines: Sauk and Fox (1804)

(a) Land ceded by Chippewa, Menominee, and Winnebago in 1827 for use by the New York Indians, but because of irregularities in the treaty, the Menominee who were actually resident in the area in 1827 repudiated any claim by the New York Indians. In 1831, the area marked (b) was ceded by the Menominee for use by the New York Indians. The present Oneida reservation was granted in the southeastern end of this same tract in 1838. Meanwhile, in 1831 the Stockbridge-Munsee and Brotherton were granted areas (c) and (d). In 1839 they ceded the eastern half (e) of their total holdings; in 1848 they ceded the western half (f). At that time the Brotherton opted for citizenship, but the Stockbridge-Munsee chose to remain under federal jurisdiction. Like a number of other Wisconsin tribes, they were supposed to move to a reservation in Minnesota, but this plan was not carried out, and in 1856 the Stockbridge received their present reservation. (The dates of cession are those when treaties were signed, ratification by the U.S. Senate often occurred a year or more later.)

(Lurie 1980: 18)

St. Croix County was divided into Polk, Pierce, and St. Croix county along the lines of the present boundaries. Prescott was designated the county seat of Pierce County.

As population increased during the 1850s and 1860s, townships were added to St. Croix and Pierce counties. Within the St. Croix Study Area, Eau Galle was one of the first townships in the county to be settled in 1858. It was then known as "Brookville" and boasted a post office and sawmill both of which dated to 1853 (Easton 1909:750). Brookville was an active sawmill district. Cady Township was organized in 1870, although it was formed from Eau Galle Township to the west in 1864. Cady had had a post office since 1860 (Easton 1909:742).

Gilman Township in Pierce County was organized as "Deerfield" but later changed its name to Gilman in honor of B.F. Gilman, its first settler who had arrived in 1859 (Easton 1909:552). Spring Lake Township was organized in 1868 (Easton 1909:655), and was named for the numerous springs found there at settlement.

Most of the early settlers to this area of Wisconsin came from New England, New York, and Ohio (Saxton 1937:5), but the area soon attracted farmers from Scandinavia, Germany, Ireland, and French Canada (Brown 1971:4). Many of these early settlers were lumber jacks or had been connected with the fur trade.

The earliest industry to attract settlers to the Chippewa River was lumbering. The Chippewa River Valley contained about one-sixth of the pine timber west of the Appalachians (Fries 1951:20-21). Pineries on the Eau Galle, a tributary of the Chippewa, lay north of the Study Area. Although logging in the Chippewa district began in the 1840s, speculators, lumbermen, and settlers precipitated a boom during 1855 and 1856, when many of the first settlers came to the Study Area (Fries 1951:21). The Panic of 1857 put a quick end to this first boom, but lumber output in the Chippewa district steadily increased. During the decade of the 1860s, the annual log cut increased from 60 million to 436 million board feet (Ibid.)

Spring Valley, El Paso (on the Rush River), and Rock Elm (south of the Study Area), were lumber towns during the 1860s. According to one source, the town of Spring Valley was little more than a logging camp until about 1890 (W.P.A. 1941:477). The L'Eau Galle, from the French meaning "River of the Gravel Bank" (Weatherhead 1978:32), is said to have had three sawmills operating along its length during the 1870s. A steam driven sawmill was located upstream from the Study Area at Woodville in St. Croix County in 1874. Another mill was located at Wildwood, now a ghost town site five miles northwest of Spring Valley, which flourished in the late 1870s. Brookville, another one-time settlement south of Woodville also had a sawmill (Weatherhead 1978:55). In the late 1880s, Wildwood's

population was about 400 people, but as the lumber became depleted and the mill shut down, many of its residents moved to Spring Valley (Brown 1971:9).

During the decades from 1860 to 1890, the town of Spring Valley was a center of farming and lumbering. The foremost industry in town was a large water powered mill located in the extreme southeast corner of the village. Power for this mill was obtained by damming the Eau Galle River. This mill manufactured spokes and staves used to make barrels and buckets (Ibid.). The town did not rely solely on the lumber industry, however. Shortly after the turn of the century, the three leading businesses in town were the Spring Valley Stave and Heading Company, the Spring Valley Iron Works, and the Spring Valley Iron and Ore Company. The Iron Works made iron and brass castings and some engine work in their machine shop (Easton 1909:661).

The second boom at Spring Valley was connected to iron ore. In 1890, a man named W.W. Newell discovered a large deposit of iron ore about two miles west of the town. With backing from a Stillwater businessman named Salkin, the Eagle Iron Ore Company was formed. Around 1900 a Chicago firm bought Eagle and renamed the company the Spring Valley Iron and Ore Company. A smelter was brought in from Black River Falls and set up at the extreme north end of town, which boomed the community when operations began in 1892. During the year, the Chicago, St. Paul, Minneapolis, and Omaha Railroad extended a line from Wildwood to Spring Valley. This road brought a fresh influx of Polish, German, and Italian laborers to work the mines, smelter, and limestone quarries (Brown 1971:10). Two open pit mines were developed. The Gilman mines were two miles west of Spring Valley. This may have been the origin of "Mines Creek" in the Study Area. The second mine was the Cady Creek Mines five miles to the southeast. Ore was taken by pick and shovel.

The smelter required limestone from two quarries -- a small one a mile southwest of town and a larger one five miles to the south east. Charcoal from Wildwood fueled the smelter. In the blast furnace, limestone combined with impurities in the ore to form molten slag which was drained off. This process produced pig iron. While the demand for such pig iron was good, the smelter operated almost continuously. The market, however, collapsed in 1907, forcing the smelter to close for two years. The smelter reopened briefly in 1909, but closed forever in 1910 (Brown 1971:11-13).

The closing of the smelter hit Spring Valley hard. It had been the economic backbone of the community for nearly 20 years. Many of the newcomers left the town and Spring Valley population declined. Thereafter, the community became a local trade center for the surrounding agricultural area.

Throughout the twentieth century, the Eau Galle River has periodically flooded, causing damage to the town of Spring Valley. Floods occurred in 1903, 1907, 1922, 1934, 1938, and 1942 (Merritt 1979: 368). During the flood of 1934, water rose five to seven feet in the main street. Three floods occurred during the spring and fall of 1942, the last rising to the second floor level in buildings in the business district. The citizens of Spring Valley considered moving the entire town out of the floodplain. At one point, the famous architect, Frank Lloyd Wright, was brought in to examine the new townsite and draw up plans. Adequate funding, however, could not be obtained to move the town. Eventually the Corps of Engineers solved the problem with the construction of Eau Galle dam and reservoir, completed in 1969 (Brown 1971:19-23).

IV. LITERATURE AND RECORDS SEARCH METHODOLOGY AND SURVEY RESULTS

A. Literature and Records Search Methodology

A cultural resources literature search was conducted according to the "definitions" presented in Section 5.09 of the Scope of Work (Appendix A) by qualified historians/architectural historians, between October 23, 1980 and August 25, 1981.

The known records search was conducted during the week of October 26, 1980 in Madison, Wisconsin at the State Historic Preservation Office and in the Anthropology Museum and State Archaeologist's Office in the State Historical Society.

National Register and non-Register site inventory files for standing structures and archaeology were searched for the St. Croix-Pierce County Study Area in the State Historic Preservation Office. In the Anthropology Museum, the Wisconsin Archeological Codification Files and historic Indian files were searched. Dr. Joan E. Freeman kindly assisted in locating all unpublished reports on the Eau Galle Study Area and was interviewed by the investigating historian.

Only one historic site, a Norwegian log house, not on file in the Museum of Anthropology, was entered in the State Historic Preservation Office's standing structure inventory. The remainder of site records were archaeological and were duplicated in the two offices.

The literature search was conducted using the following collections:

1. Archives, map collections, and reference library, Wisconsin State Historical Society, Madison, Wisconsin
2. Archives and reference library, Minnesota Historical Society, St. Paul, Minnesota
3. University of Minnesota libraries, Minneapolis, Minnesota
4. Pierce County Historical Association, Mrs. Ursula Peterson, President
5. St. Croix County Historical Society
6. Trygg Land Office, Ely Minnesota (Original Land Surveyor's Notes)

B. Survey Results

1. Norwegian log house

This structure was the only standing structure located during the course of this investigation in the inventory files of the State Historic Preservation Office. Its location is shown in Figure 13. At the request of the investigating historian, it was photographed and appears below.



Plate 1: View of the front of three room 1½ story Norwegian log house. Log has been resided with shiplap on this portion of the structure. Note original shingled roof.

No photographs of this structure and its associated outbuilding appeared in the State Historic Preservation Office site inventory. Photographs show the house to be in poor condition. The literature search did not yield information on the possible historical significance. From an architectural point of view, the house is of a type commonly found in Wisconsin and the upper midwest. This site is not located on Corps-owned property and is not in any of the Control Areas. No further testing is recommended.

Figure 13

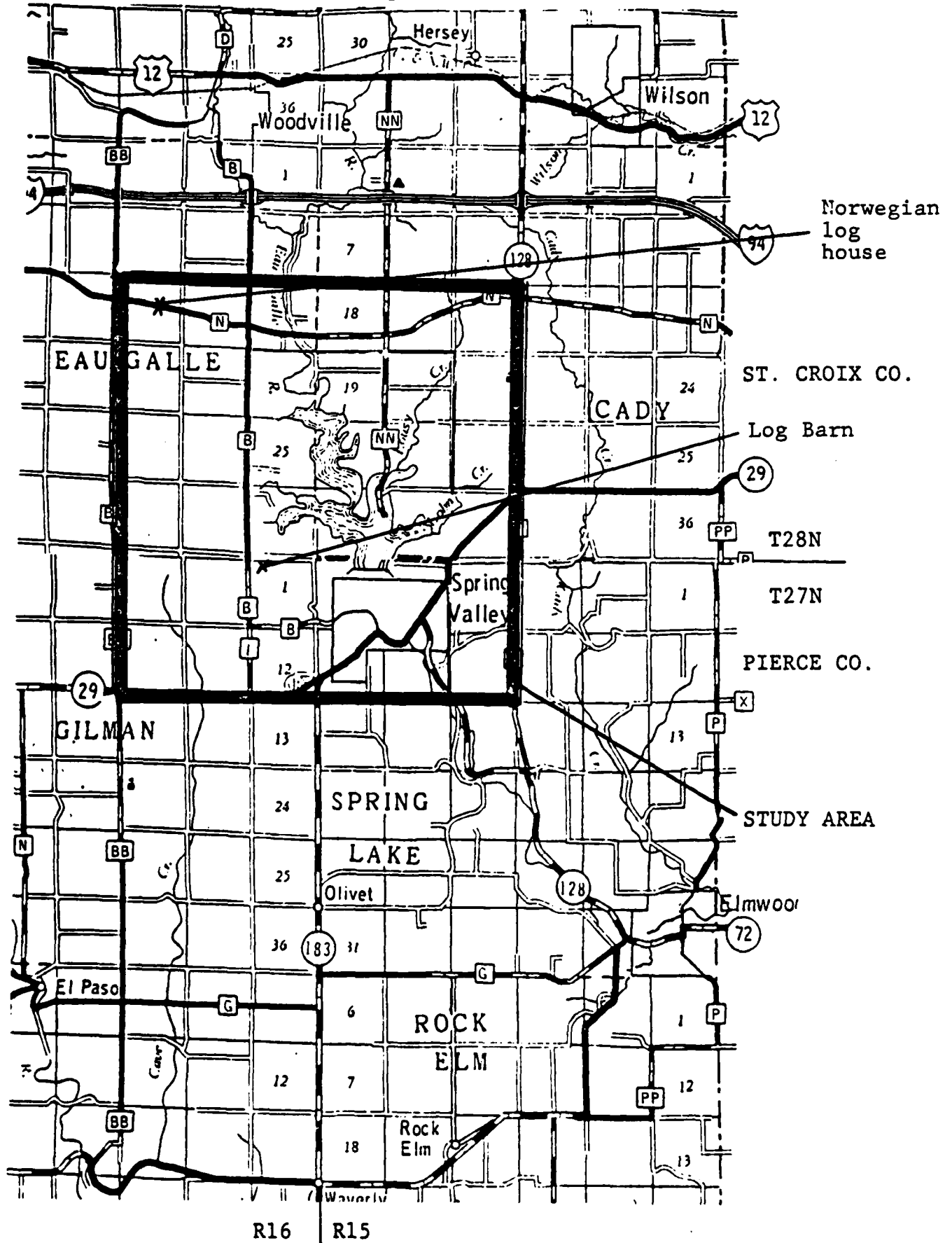




Plate 2: Rear portion of Norwegian log house is lap sided and one story. The original shingles can be seen under the asphalt rolled roofing.



Plate 3: Outbuilding associated with the Norwegian log house. Note masonry and stone walls.

2. Log barn

A log barn, not on file in the inventory of the State Historic Preservation Office was photographed and literature searched. It is located .1 mile east of the intersection of the county line road and County Road B (NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 1 T27N R16W). Its location near the Corps property entrance is shown in Figure 13. This structure appears to be a single pen log structure to which has been added another sawn lumber pen, roofed over with shingles to create an open dogrun. The corner timbering (Plate 4) appears to be half-dovetail or possibly square notched, although the structure was not field-checked by an architectural historian. Half-dovetail and square notch are two common corner timbering methods found in the eastern United States and are more sophisticated than the saddle notch. These two forms of corner timbering are probably Yankee (English/German) in origin, rather than Scandinavian or French Canadian (Kniffen and Glassie 1966). The structure may date as early as the 1860s when the area was first settled. This structure is not located on Corps-owned property and no further work is recommended.



Plate 4: Log barn, indicating original log pen, dogrun (open) and frame pen.

3. Three historic standing structure sites in
Control Area 6

Three standing structure sites located in Control Area 6 (see Figure 14) were located by the investigating archaeologist during the course of the Phase I field investigation. None are on file in the inventory of the State Historic Preservation Office.

a) Site A in Plate 5 is a small brick structure located in Figure 14. It is brick, with stone lintels and an asphalt roof in good repair.



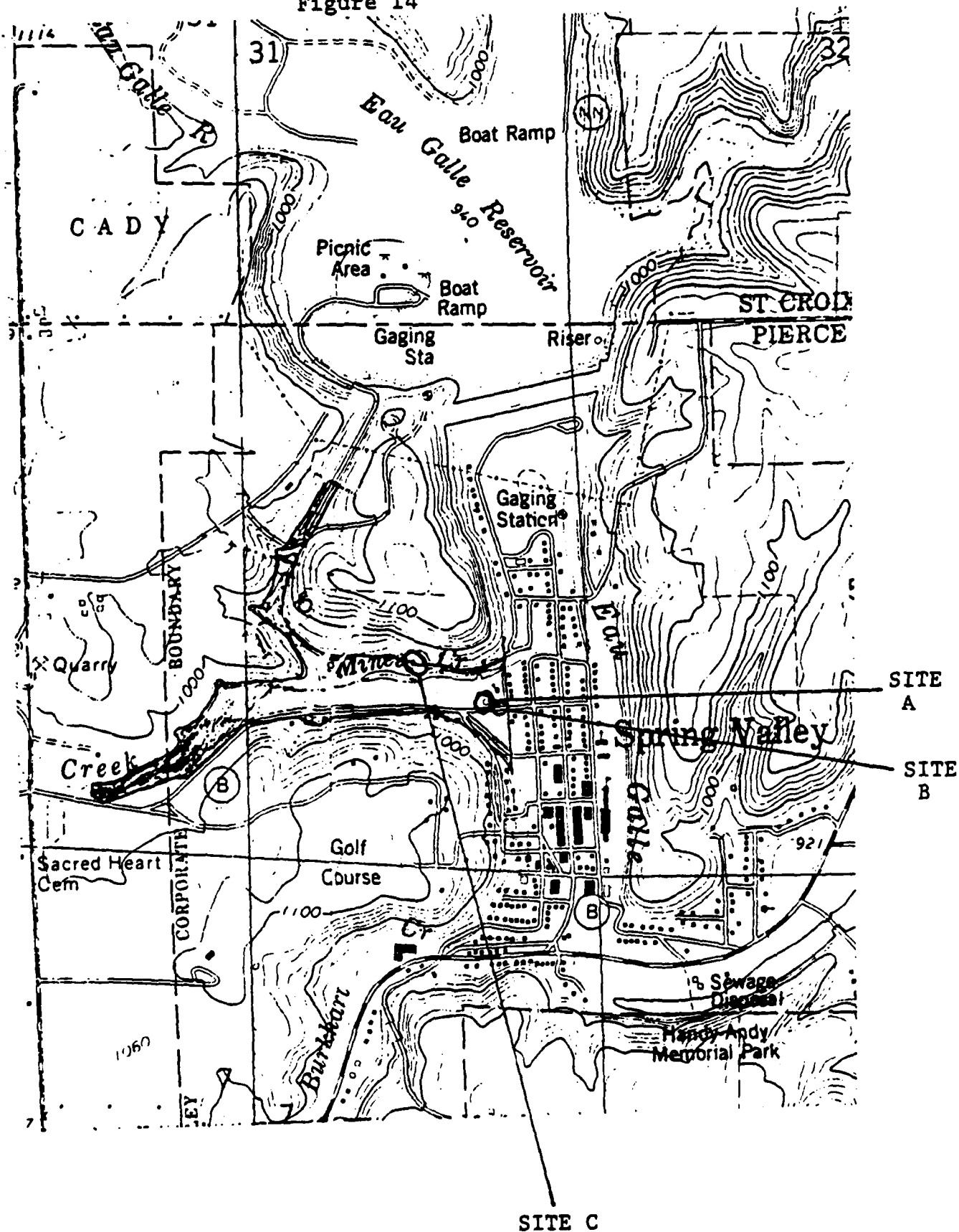
Plate 5: Railroad well house

According to a local informant with whom the investigating archaeologist spoke, this structure is a railroad well house, and would have been constructed after 1892 when the railroad reached Spring Valley. The function of this building could not be verified during the course of the literature search and records review.

If this building is significant, its significance and possible eligibility to the National Register might be contextual; i.e., it may depend on how many such well houses are extant in Wisconsin.

This structure is not located on Corps-owned property and no further work is recommended at this time. However, should the Corps plan

Figure 14



future work in this area which may endanger the building and its site, an assessment of the function and potential eligibility to the National Register should be undertaken.



Plate 6: Railroad well house (left) and old school (right)

b) Site B located in Control Area 6 (Figure 14) is a frame structure with lap siding pictured in Plates 6, 7, and 8. It is sitting on a new cinderblock foundation. Several of the windows have been sided over, a new chimney and a double door have been added. This structure probably dates in the 1865-1920 range. According to a local informant with whom the investigating archaeologist spoke, the structure is a school house which was moved to its present site. The general architectural form is that of a frame school house of the type commonly found in the upper midwest. The literature and records search could not determine its original location. As a result, the structure can not be dated with any precision. Given the alterations and the fact that it has been moved, and the existence of school houses in better condition on original sites, we do not believe the structure is potentially eligible to the National Register. It is not located on Corps-owned property and no further work is recommended.



Plate 7: Old school house; note windows blocked up and double door added. It is sitting on a new concrete block foundation.



Plate 8: Side view of old school house

c) Site C consists of a house and two outbuildings on private property (Figure 14). These appear in Plate 9 below.

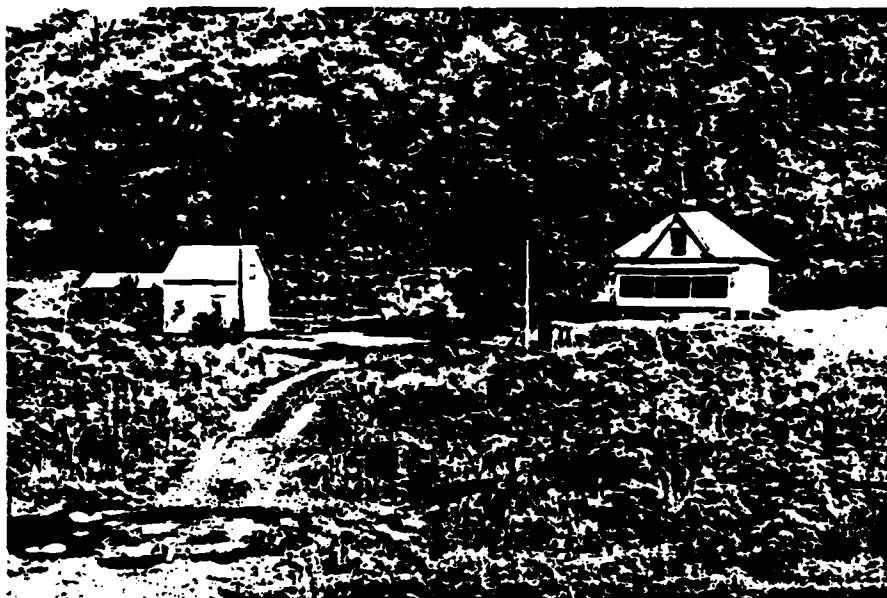


Plate 9: House and two outbuildings

The house is square lap-sided frame with a high pyramidal roof and a front porch. The two outbuildings are frame. The house is a vernacular style common in the upper midwest between approximately 1900 and 1930. These buildings are not on Corps-owned property, are not architecturally unusual, and no further work is recommended.

C. Prehistoric and Historic Sites Inventory

The following site sheets present the results of the known site records search. There are no National Register sites in the Project Areas or the Study Area. Figure 11 indicates the location of the 28 prehistoric archaeological sites. Figure 13 indicates the location of the three room Norwegian log house, the only known historic site located during the course of the records search.

Because of a number of discrepancies found during the literature search and the Phase I field investigation between the 1) State Historic Preservation Office inventory sheets, 2) the Wisconsin Archaeological Codification File, 3) the unpublished field reports, and 4) the field investigation conducted by Archaeological Field Services, Inc., the following site sheets present the current information in the Wisconsin records systems. The recommendations

on the site sheets are those made by previous investigators in the existing records.

Discrepancies between the Phase I field investigation and current records are listed in the Investigation Results section (Chapter 6) of this report.

The site sheets are organized as follows:

- 1) Prehistoric archaeological sites are listed before historic sites.
- 2) Counties are listed alphabetically. Pierce County sites precede St. Croix County sites.
- 3) Archaeological sites are organized by state site number in ascending order; hence, site 47-Sc-23 precedes site 47-Sc-24.

The only information added to the existing site sheets which follow is Quadrangle references, full reports/reference citations, and Township designation.

Pierce County, Wisconsin

LAMB I - (47-Pi-22) - Spring Lake Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: NW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 6 T27N R15W

Verbal Description: At foot of hill in the edge of a corn-field about 500' west of Eagle Spring

Investigator and Date: Unknown

Reports/References: Brandon, Jay

1967 Excavations at the Lamb-5 site (47-Sc-25), Saint Croix County, Wisconsin. On file: SHSW.

1968 Excavations at the Lamb-5 Site (47-Sc-25), Saint Croix County, Wisconsin. *The Wisconsin Archeologist*, 49(1): 1-31.

Kerr, Hank P.

1964 Archeology of the Eau Galle River Valley Dam Salvage Project. On file: SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - implement fragment and flakes found; site has been inundated and destroyed

St. Croix County, Wisconsin

Unnamed site - campsite (47-Sc-1) - Cady Township

Quadrangle Reference: Wilson - 7.5' Series - 1974

Legal Description: N $\frac{1}{2}$ NW $\frac{1}{4}$ Section 15 T28N R15W

Verbal Description: On road to Brockville, 3 miles S.
of Wilson

Investigator: Charles E. Brown, 1925

Reports/References: Brown, Charles E.
1925 Fifth Edition to a Record
of Wisconsin Antiquities,
The Wisconsin Archeologist,
ns, 4(2):85-144.

Cultural Affiliation: Unknown

Site Description: Camp site

St. Croix County, Wisconsin

LARSON I (47-Sc-9) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: On small rise 300 ft. west and 100 ft.
north of bridge where C.H. NN crosses
Lohn Creek.

Investigator: A.D. Buck, 1932

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On file:
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - Flakes and bone fragments found

St. Croix County, Wisconsin

LARSON II (47-Sc-10) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: 200 ft. west of Larson site I (Sc 9)

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On file:
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - ceramic & bone (burned)
fragments found

St. Croix County, Wisconsin

LARSON III (47-Sc-11) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 32 T28N R15W

Verbal Description: 100 ft. east of Lohn Creek at foot of hill

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On file:
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - 4-2' x 2' test squares dug -
flakes and 1 projectile point found.

St. Croix County, Wisconsin

LAMB II (47-Sc-12) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: Eroded slope of a hill directly south
of barn

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On file:
SHSW:

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - lithic material found

St. Croix County, Wisconsin

LAMB III (47-Sc-13) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 32 T28N R15W

Verbal Description: In garden east of Lamb's house

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On file:
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - Lithic material found

St. Croix County, Wisconsin

STRUM I (47-Sc-14) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: NW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: On small sand ridge on edge of river

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On file:
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - lithic and animal material
found

St. Croix County, Wisconsin

STRUM II (47-Sc-15) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: NW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: 500 ft due west of SC 14

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On file:
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - lithic artifacts found

St. Croix County, Wisconsin

HOLMAN I (47-Sc-16) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: North of barn in corn field

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On File:
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - Lithic artifacts found

St. Croix County, Wisconsin

HOLLERUDE I (47-Sc-17) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 30 T28N R15W

Verbal Description: South of property line at eastern
slope of hill north of Lousy Creek

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On file:
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - lithic artifacts found

St. Croix County, Wisconsin

HOLLERUDE II (47-Sc-18) - Cady Township

Quadrangle Reference: Wilson - 7.5' Series (?) - 1974

Legal Description: SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 30 T28N R15W

Verbal Description: On small rise between house and creek
500 ft. east of Sec. 17.

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On File:
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - lithic material found

St. Croix County, Wisconsin

HOLLERUDE III (47-Sc-19) - Cady Township

Quadrangle Reference: Wilson - 7.5' Series - 1974

Legal Description: SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 30 T28N R15W

Verbal Description: South of house

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On file:
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Condition: Campsite - lithic artifacts found

St. Croix County, Wisconsin

ANDERSON I (47-Sc-20) - Cady Township

Quadrangle Reference: Wilson - 7.5 Series- 1974

Legal Description: NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: at bend of Lousy Creek

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On file
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Condition: Campsite - lithic artifacts found

St. Croix County, Wisconsin

ANDERSON SITE II (47-Sc-21) - Cady Township

Quadrangle Reference: Wilson - 7.5' Series - 1974

Legal Description: NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On file:
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - five (5) test pits sunk and
lithic material found

St. Croix County, Wisconsin

ANDERSON III (47-Sc-22) - Cady Township

Quadrangle Reference: Wilson - 7.5' Series - 1974

Legal Description: NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: South end of field

Investigator: A.D. Buck, 1963

Reports/References: Buck, Dewey A. and Bent Thygesen
1962 Archaeological Survey of the
Eau Galle Reservoir, Spring
Valley, Wisconsin. On file:
SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - test squares dug and lithic
material found

St. Croix County, Wisconsin

LARSON 4 (47-Sc-23) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 32 T28N R15W

Verbal Description: South bank of Lohn Creek; in pasture
about 200 yards east of old foundation
of Larson's barn

Investigator: H.P. Kerr, 6/64

Reports/References: Kerr, Hank P.
1964 Archeology of the Eau Galle
River Valley Dam Salvage Pro-
ject. On file: SHSW.

Cultural Affiliation: Archaic

Accession: SHSW

Site Description: Campsite located on edge of creek.
Evidenced by numerous flakes found
eroding from the steep 4 ft. high
creek bank.

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

LAMB 4 (47-Sc-24) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: 100 yds. N. of Lamb house & situated
on bluff

Investigator: H.P. Kerr, 6/64

Reports/References: Kerr, Hank P.

1964 Archeology of the Eau Galle
River Valley Dam Salvage Pro-
ject. On file: SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - Chip and flake debris and
some bone fragments on slope. Eau
Galle River lies below and to the north

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

LAMB 5 (47-Sc-25) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: First terrace; West bank of Eau Galle River

Investigator: H.P. Kerr, 6/64

Reports/References: Kerr, Hank P.

1964 Archeology of the Eau Galle River Valley Dam Salvage Project. On file: SHSW.

Cultural Affiliation: Archaic

Accession: SHSW

Site Description: Large campsite in pasture area. Land has never been plowed as evidenced by numerous large trees over all of the first terrace. Steep hill just upstream from site about 100 yards forms a bluff of Eau Galle River.

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

LAMB 6 (47-Sc-26) - Cady Township

Quadrangle Reference: El Paso - 7.5' Series - 1974

Legal Description: SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: Corn field west of barn (300 yds.
west)

Investigator: H.P. Kerr, 6/64

Reports/References: Kerr, Hank P.

1964 Archeology of the Eau Galle
River Valley Dam Salvage Pro-
ject. On file: SHSW.

Cultural Affiliation: Archaic

Accession: SHSW

Site Description: Campsite - flake & chip debris + 1 point

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

LAMB 7 (47-Sc-27) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: North of Lamb 6 site approximately
200 yards in cornfield

Investigator: H.P. Kerr, 6/64

Reports/References: Kerr, Hank P.
1964 Archeology of the Eau Galle
River Valley Dam Salvage Pro-
ject. On file: SHSW.

Cultural Affiliation: Archaic

Accession: SHSW

Site Description: Campsite - flake debris

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

STRUM III (47-Sc-28) - Cady Township

Quadrangle Reference: Spring Valley - 7.5' Series - 1974

Legal Description: NW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: Between Strum II and the road. East
of Matson house @ 150 yds.

Investigator: H.P. Kerr, 6/64

Reports/References: Kerr, Hank P.

1964 Archeology of the Eau Galle
River Valley Dam Salvage Project.
On file: SHSW.

Cultural Affiliation: Archaic

Accession: SHSW

Site Description: Campsite - chip & flake debris - ex-
tensive in area but poor in materials

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

HOLMAN 2 (47-Sc-29) - Cady Township

Quadrangle Reference: El Paso - 7.5' Series - 1974

Legal Description: SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: 100 yards due east of Holman house
and on knoll - in cornfield

Investigator: H.P. Kerr, 7/64

Reports/References: Kerr, Hank P.

1964 Archeology of the Eau Galle
River Valley Dam Salvage Pro-
ject. On file: SHSW.

Cultural Affiliation: Archaic

Accession: SHSW

Site Description: Site is situated on slight rise.
Numerous flakes, knife fragments,
dirt points.

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

HOLMAN 3 (47-Sc-30) - Cady Township

Quadrangle References: El Paso - 7.5' Series - 1974

Legal Description: SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: Oat field about 200 yards NE of barn

Investigator: H.P. Kerr, 7/64

Reports/References: Kerr, Hank P.

1964 Archeology of the Eau Galle
River Valley Dam Salvage Pro-
ject. On file: SHSW.

Cultural Affiliation: Archaic

Accession: SHSW

Site Description: Campsite - situated on level ground

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

HOLMAN IV (47-Sc-31) - Cady Township

Quadrangle References: El Paso - 7.5' Series - 1974

Legal Description: NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: 250 yds. NE of Holman barn & at edge
of terrace. It is planted to hay at
present

Investigator: H.P. Kerr, 7/64

Reports/References: Kerr, Hank P.
1964 Archeology of the Eau Galle
River Valley Dam Salvage Pro-
ject. On file: SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite on west bank of Eau Galle; on
highest terrace.

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

GEIGER I (47-Sc-32) - Cady Township

Quadrangle Reference: El Paso - 7.5' Series - 1974

Legal Description: SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: 150 yds. west of Lowwater Bridge
crossing Eau Galle and south of the
road in pasture.

Investigator: H.P. Kerr, 7/64

Reports/References: Kerr, Hank P.
1964 Archeology of the Eau Galle
River Valley Dam Salvage Pro-
ject. On file: SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite on French Creek. Located im-
mediately so. of road. One (1) knife
base, flake debris.

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

JOHNSON I (47-Sc-33) - Cady Township

Quadrangle Reference: El Paso - 7.5' Series - 1974

Legal Description: NW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 30 T28N R15W

Verbal Description: On 1st terrace east of Eau Galle
and immediately north of terrace's
abutment with hill.

Investigator: H.P. Kerr, 6/64

Reports/References: Kerr, Hank P.
1964 Archeology of the Eau Galle
River Valley Dam Salvage Pro-
ject. On file: SHSW.

Cultural Affiliation: Unknown

Accession: SHSW

Site Description: Campsite - limited flake debris

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

JOHNSON 2 (47-Sc-34) - Cady Township

Quadrangle References: Baldwin East - 7.5' Series - 1974

Legal Description: SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 30 T28N R15W

Verbal Description: 1st terrace east of Eau Galle and immediately south of hill

Investigator: H.P. Kerr, 6/64

Reports/References: Kerr, Hank P.

1964 Archeology of the Eau Galle
River Valley Dam Salvage Project.
On file: SHSW.

Cultural Affiliation: Archaic

Accession: SHSW

Site Description: Extensive campsite area. Limited (2 ft. max.), abundant materials

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

LONGSETH 1 (47-Sc-35) - Cady Township

Quadrangle References: Wilson - 7.5' Series - 1974

Legal Description: SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 31 T28N R15W

Verbal Description: Across road and due east of Longseth house, north of Strum 3 (Sc 28).

Investigator: H.P. Kerr, 1964

Reports/References: Kerr, Hank P.
1964 Archeology of the Eau Galle
River Valley Dam Salvage Project. On file: SHSW.

Cultural Affiliation: Archaic

Accession: SHSW

Site Description: Campsite - flakes, cores, bone fragments,
point or knife midsection

Remarks: Destroyed by Eau Galle Reservoir

St. Croix County, Wisconsin

LOG HOUSE - Eau Galle Township

Quadrangle Reference: Baldwin East - 7.5' Series - 1974

Legal Description: SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 15 T28N R16W

Verbal Description: CTH N, north side, 0.6 miles east of
intersection with CTH BB.

Reports/References: None

Cultural Affiliation: Unknown

Site Description: A three-room Norwegian log house.

V. FIELD METHODOLOGY AND PHASE I SURVEY RESULTS

A. Field Methodology

The field work has been conducted according to the "definitions" (Section 3.05) presented in the Scope of Work (see Appendix A).

The archaeological survey was a reconnaissance level field investigation of the U.S. Army Corps of Engineers property adjacent to the Eau Galle Reservoir (Figure 3). The field work was accomplished employing visual, surface, and subsurface testing techniques as were determined necessary by the investigating archaeologist, as set forth in the Scope of Work (Appendix A, Section 4.00 - subsection 4.02). The field work was conducted with a three person field crew the weeks of July 13, July 27, and August 10, 1981. Standard archaeological field equipment, a small boat, and a four wheel drive vehicle were employed.

An analysis of the current physical condition of the reservoir was conducted consisting of: a wind-shield survey (wherever possible), an intensive study of the project area from the maps available, and numerous meetings with the Corps of Engineers Maintenance Manager, Tom Novak, concerning reservoir pool depth fluctuation and potential historic and prehistoric archaeologically important areas. This analysis took place prior to Phase I testing to gain a maximum amount of information concerning the project area at the initiation of field work. Archaeological techniques and methods used for this pedestrian survey to identify and locate previously unknown cultural resources (pre-historic, proto-historic, and historic) were as follows:

1. Surface Examination

A. Traditional pedestrian survey or surface collection was employed wherever adequately exposed surface areas or vertical stratigraphy existed. Erosional cuts, bare ground, shorelines and banks, cut faces and other types of disturbed areas such as rodent burrowing were carefully examined for the presence of cultural materials and/or archaeological features. Please note this locational technique is adequate only in areas which exhibit the above characteristics.

Varying surface transect intervals were employed as dictated by the availability of exposed soils present on a tract-to-tract basis and as determined necessary by the investigating archaeologist. Intervals varied between fifteen (15) and twenty (20) meters under normal survey conditions. In areas of extremely high potential, more stringent intervals may be employed. In areas with extensively disturbed soils, or where physical obstacles are present, deviation from the above intervals may be unavoidable. Visual examination alone may be sufficient where there has been past soil disturbance.

Shovel testing and/or soil probes were executed at fifteen (15) meter intervals wherever the soil was relatively undisturbed. Due to the disturbance associated with annual flooding, several portions of our survey area contain badly eroded cut banks, areas of complete surface erosion down to subsoil and some areas of re-deposited silt and clay. Also several portions of the survey area are heavily disturbed by rodents. This form of disturbance lessens the effectiveness of shovel testing considerably. However, by surface examining the spoil piles created by burrowing, an excellent sample of subsurface cultural material can be effectively obtained without adding to the present disturbance.

In areas where natural or partially intact cultural resources are present, more intensive subsurface testing is implemented including test excavations if warranted.

b. Shovel testing is a technique which employs small excavation units approximately thirty-five to fifty (35-50) cm. in diameter. The units are excavated to a depth sufficient to allow examination of the soils below the modern plow zone or surface humus layer. Notations of the geologic materials content are noted. Following the notation of stratigraphy and careful examination of the contents (via $\frac{1}{4}$ " mesh screen), all shovel tests are immediately back-filled.

c. Formal test units are normally employed where shovel tests produce positive cultural resource results. They are generally more carefully excavated with control being of paramount importance in the documenting of artifact/feature provenience. Like the shovel testing, these units are excavated to a depth sufficient to allow examination of the soils below the modern plow zone or surface humus layer. Also, notations of the geologic materials content are noted. Following the notation of stratigraphy and careful examination of the contents (via $\frac{1}{4}$ " mesh screen) and usually excavated and screened by horizontal levels, all formal test units are immediately back-filled.

d. Hand soil probes were employed to detect strata which may contain cultural material, to verify continuing soil stratigraphy or confirm disturbed soils, and to detect possible buried soil horizons which might contain cultural bearing soils.

2. Archaeological Potential

The tracts inventoried during the course of this investigation were selected from each designated stratum. During selection, a preliminary and superficial analysis of the possible archaeological potential of each tract was undertaken in an effort to better prepare the investigators prior to the actual field investigation. Some of the criteria which were used in determining archaeological potential are:

a. Hydrology

1. Examination of rivers, streams, and creeks which might contain water hole formation, possible permanent water sources
2. Examination of areas at the confluence of streams where water holes form upstream on the confluent stream with the highest velocity
3. Examination of the study area surroundings-flood plains, terraces, and meandering channels - to determine whether the valley could support horticultural/agricultural communities and their associated sites
4. Examination of the channel for size, elevation, condition, topographic, relation to other land forms and geological origin
5. Examination for steep gradients, rapids or waterfalls and their possible associated cultural resources
6. Evidence of seasonal water level fluctuation and their affects prior to reservoir and dam construction

b. Physiographic, Vegetational, and Cultural Resources

1. Regional topography, glacial deposits and formation
2. Soil types (fertility and drainage) and water tables
3. Availability of raw lithic materials for utilization by prehistoric and historic peoples
4. Present vegetational cover
5. Past vegetational cover (employment of knowledge regarding paleo-environmental factors)
6. Proximity to known or suspected cultural resources

c. Indications of Destruction of Strata Which Might Contain Cultural Data

1. Extensive and deep cultivation (recent)
2. Heavily eroded areas (water and wind), and degree of ground slope

3. Seasonal flooding and erosion
4. Water scoured areas
5. Historic buildings and ruins such as foundations (of all descriptions)
6. Roads, paths, and trails
7. Ditches, irrigation, tiling
8. Stream/channel alteration (of any description)
9. Extensive dredging (destruction in some instances and deeply burying of possible cultural resources in others)
10. Rodent disturbance

Determination of archaeological potential may be derived from an analysis of, but are not limited to, the above criteria. This analysis may provide some indication as to the possibility of the presence of cultural material when examined in light of the material culture characteristics and environmental factors of known sites.

This process is a tool used by the investigating archaeologist in his endeavors to extract as much background data as possible from a given locale so as to spend his in-field time most efficiently and productively. It is not a "pattern" or "model" by which sites are found.

B. Survey Results

For reasons of clarity and ease of discussion, the Eau Galle Reservoir property was divided into six Control Areas (see Figure 3).

Control Area #1

Our survey of this control area began on the bluff containing two overlooks located between the emergency spillway area to the west and the permanent dam to the east (see Photographic Plate No. 10). Portions of this bluff are fairly flat and afford an excellent view of the majority of the reservoir. Presumably, prior to dam construction, there was access down the bluff to water in the area where the dam is now located. These factors increase the potential for prehistoric land use and possible occupation.

The entire top of the bluff was surface examined at five to ten (5-10) meter intervals. Subsurface testing included a transect of fifteen (15) meter interval 50x50 cm. shovel tests where possible (AFS, Inc. file transect 2084H-1-1) as well as thirty (30)

meter interval soil probe core examinations. The results of the testing revealed that the entire top of the bluff had been extensively altered from heavy earth moving equipment as well as landscaping disturbance. The soils on the top of the bluff consist of five to seven (5-7) cm. of planted sod over thirteen (13) cm. of yellow gravel soil over twenty (20) cm. of mottled grey and brown clay mixed with rocks on top of dolomite bedrock. Other disturbances include an asphalt parking lot on the west side of the dam and timber and concrete overlook construction (see Photographic Plate No. 10).

Another overlook of the dam is located atop the bluff. The access to this area is a two (2) meter wide gravel trail which begins at the Corps parking lot and ends at this overlook. The majority of this trail extends the entire width of the bluff which is bordered on both sides by approximately 40° slopes. The soils are extremely thin on this trail with several areas of exposed yellow rock and gravel subsoil and exposed boulders. The overlook itself has been constructed of rock and cement. This area was extensively surface examined and one shovel test was excavated into the subsoil to insure that no hidden soil horizons were buried underneath. The slopes along the entire area, from the emergency spillway area to the dam, were soil probed down to the waterline to the north. It has been determined that these slopes are too steep to contain any artifactual material other than that which may have been redeposited due to erosion or overlook construction. No artifacts were recovered from this area. There is a possibility that a buried cultural soil horizon may exist underneath the asphalt parking lot. However, there is no way to determine this at the present time, and testing that area of disturbance was not part of this Phase I testing scope.



Photographic Plate No. 10: 270° - showing a general view of the overlook area. Note the asphalt parking lot in center of the photograph, sodded field in extreme left and tree and brush plantings in foreground. H. Clyde Pedersen and T. O'Brien are shovel testing in center background.



Photographic Plate No. 15: Showing the general overview of the first two overlook areas taken from the eastern bluff looking southwest.

Our survey of this control area continued on an overlook on top of the bluff east and adjacent to the permanent dam (see Photographic Plate No. 16). The area is quite similar to the overlook just discussed, including a good potential for prehistoric archaeological land use and possible occupation. The area within the Corps-owned property line to the edge of the bluff was surface examined at five to ten (5-10) meter intervals. The subsurface examination included a fifteen (15) meter interval (50x50 cm.) shovel testing transect (AFS, Inc. File transect 2084H-1-2) running north/south along the top of the bluff, and thirty (30) meter interval soil probe core examinations periodically placed to assure that the soils were consistent with the soil profiles taken from the shovel test pits. The soil stratigraphy revealed, through the shovel testing, zero to seven (0-7) cm. of brown clay loam from the grass sodding, followed by ten (10) cm. of tan sandy clay followed by deteriorating yellow dolomite. No artifacts were recovered from this area.

The slopes were extremely steep adjacent to this area and periodic soil probes were employed to check for soil anomalies. It has been determined that these slopes are too steep to contain any artifactual material and have been badly disturbed by soil redeposition due to erosion or overlook construction.



Photographic Plate No. 16: 285° - showing the general overview of this area. Note the sodded field where H. Clyde Pedersen and T. O'Brien are shovel testing. Also the picnic area is located in the left center of the photo across the reservoir.

A small portion of lowland is present bordering the road leading from the spillway to the picnic area and swimming beach. This entire area has been extremely disturbed from the dam construction. Subsurface testing consisted of continuous thirty (30) meter interval soil probe transects. The soils consisted of a small amount of mottled brown sandy loam on top of brown clay and rock. Additionally, a fifteen (15) meter interval surface examination transect was employed.

The slopes next to the spillway area have been extensively disturbed from spillway excavation and dam construction. These slopes appear to contain no original soils. These areas of documented construction disturbances (Corps of Engineers dam construction records) were not surveyed as per the Scope of Work. No artifactual materials were recovered from this area.

Control Area #2

The survey of control area #2 began at the picnic area and boat landing development beginning one-eighth of a mile north of the emergency spillway area (see Photographic Plate No. 16).

There are seven (7) recorded sites associated with the picnic area and swimming beach portions of control area #2. Numerous conflicts in both legal and verbal descriptions concerning the location of these sites make it difficult to ascertain their exact geographical positions. Due to the importance of establishing prior high potential site testing areas, we utilized all of the available site recordation and documentation and projected (at best making an educated guess in some instances) their suspected locations.

The seven sites associated with this portion of control area #2 by name and number are:

Sc-9 Larson I and Sc-10 Larson II are now under water and are totally destroyed as they were located within the conservation pool borrow area of the reservoir.

Sc-12 Lamb II to the best of our knowledge, has been destroyed by picnic area landscaping, boat landing and road construction.

Sc-13 Lamb III is either located on a rather steep slope of 25-30°, or is presently under water in the reservoir.

Sc-24 Lamb IV is now under the Corps of Engineers swimming beach, extending into the reservoir at the present water level.

Sc-26 Lamb VI and Sc-27 Lamb VII are either buried under or destroyed by the disposal area, located west of the picnic area and swimming beach. These sites are not in the survey project area.

Sc-25 Lamb V has been listed in the Wisconsin Archeological Codification File as being destroyed by the Eau Galle Reservoir. After checking the legal and verbal descriptions, we feel that this site has not been totally destroyed by the reservoir but is located north of the swimming beach area.

The testing employed in this portion of the survey area began on the upland adjacent to the southern shoreline of the picnic area and south of the asphalt road which runs east to the boat ramp (see Photographic Plate No. 12). A fifteen (15) meter interval transect of 50x50 cm. shovel tests (AFS, Inc. File transect 2084H-2-1) was run west to east in this area as well as a five to seven (5-7) meter interval surface examination, employing continuous soil probe core examinations. This area has been extensively disturbed by earth moving, landscaping, and road construction. The soils revealed through shovel testing consisted of seven to ten (7-10) cm. of brown loam over ten (10) cm. of tan loess mixed with decomposing dolomite on top of decomposing limestone. No artifactual materials were recovered from this area.



Photographic Plate No. 12: 270° - A general view of the southern edge of the picnic area in control area #2. Note the Corps of Engineers maintenance personnel and truck in far left and AFS, Inc. field vehicle in left with H.C. Pedersen and T. O'Brien shovel testing in center of Photo. Also note the picnic tables and No Parking signs, representing some of the picnic area development.

The survey of this area continued with testing of the picnic area north of the asphalt road and parking lot up to the density of trees which run east/west across the highest point of the knob. Two transects were employed in this area. The first runs essentially west to east approximately ten (10) meters south and parallel to the density of trees (AFS File Transect 2084H-2-2). The second transect ran northeast to southwest from the highest point of the knob down to lower ground (AFS File Transect 2084H-2-3). This entire area has been extensively disturbed from several sources. The disturbance of this area at the time of the Kerr report (1965) was limited to the Lamb Homestead. This homestead consisted of a house with concrete foundation, out buildings, and landscaping with tree plantings (see Photographic Plate No. 11). The picnic area development included landscaping of the entire area south of the tree density now present. According to a Corps maintenance employee who was present during the original survey and reservoir development, land contour alterations with brush and tree removal were conducted as part of this construction. Presently there is a covered pavilion, picnic tables, permanent charcoal grills, playground equipment, and numerous rodent burrows adding to the disturbance. The entire open area of the picnic grounds was surface examined at fifteen (15) meter intervals, employing continuous soil probe core examinations.

Shovel testing in the first transect revealed ten (10) cm. of brown loam followed by ten (10) cm. of loess mixed with decomposing dolomite igneous rocks and clay over decomposing dolomite. Some chert flakes were recovered from shovel test #1 of this transect. Chert nodules appear to occur naturally within the dolomite subsoil bedrock throughout several portions of the Eau Galle Reservoir. These chert flakes are similar to those found laying in gravel road beds as well as eroding out of steep banks. Due to the lack of reworking on the surface of these flakes, as well as the absence of any diagnostic artifacts found during surface examination or shovel testing, it is assumed that these occur naturally.

The soils from shovel tests in the second transect consisted of ten (10) cm. of brown loam on top of thirty-five to fifty (35-50) cm. of tan loess on top of decomposing dolomite and gravel. No artifactual materials were recovered from this area.



Photographic Plate No. 11: 275° - Showing an overview of the Lamb house foundation located in the east central portion of the picnic area. T. O'Brien and H.C. Pedersen mark two of the corners with a shovel marking a third corner in left of picture. Note the large trees which surround the former farmyard, outbuilding facilities in center midground with a Corps parking lot in far left.

The survey of this control area continued with fifteen (15) meter interval transect shovel tests (where possible) on the upland, adjacent to and following the meandering shoreline, which parallels the Eau Galle River (AFS File Transect 2084H-2-3). This transect ran from the boat landing north, past the swimming beach, to the weather station. This transect 2084H-2-3 began ten (10) meters north of the boat landing and ran north along the eastern side of the picnic area to a graveled trail. This trail runs through the tree stand to the swimming beach. The soils revealed from shovel testing in this area, ten (10) cm. of brown humus on top of thirty (30) cm. of tan loess mottled with clay and mixed with rocks on top of tan sandy beach subsoil. These soils appear to be heavily disturbed from bulldozing during landscaping. No artifactual materials were recovered from either surface examination or shovel testing within this portion of the transect.

The fourth transect continued along a graveled path from the picnic area through the tree intensity to the swimming beach. The path runs along a very steep slope of approximately 45°. The path

has been cut into the slope, bladed and yellow dolomite gravel has been deposited on the path surface. No shovel testing was warranted along either the path or the steep slope because of the presence of exposed soils down to bedrock. The entire path was surface examined as well as all of the eroding cut banks. Soil probe core examinations were employed along the slopes to assure that the soils were consistantly thin to bedrock. A high intensity of chert flakes were recovered from the redeposited dolomite path. Many of these flakes appeared not to be archaeologically diagnostic, but were apparently produced by machinery capable of crushing rock for this trail construction.

The survey of this transect continued at the swimming beach and ran north to the weather station. The swimming beach has been covered by a deep deposit of sand. No shovel tests were possible on the beach, but periodic soil probes revealed the soil below the redeposited sand was fine tan sand indicating bulldozing was employed in this area as part of the beach construction. This was confirmed by Corps dam maintenance personnel.

From the swimming beach the transect went on to the weather station. The testing employed in this area consisted of fifteen (15) meter interval (50x50 cm.) shovel tests, where possible, accompanied with continuous soil probe core examinations. The majority of this area has been heavily disturbed by culvert construction, rock piling, and dirt storage. The construction of the weather station has also had a slight impact on the soils along this transect.

A fifth fifteen (15) meter interval transect of shovel testing was conducted on the northern end of the present second terrace, paralleling the Eau Galle River (AFS File Transect 2084H-2-5). This transect began ten (10) meters north of the weather station and proceeded west along a mowed nature trail (see Photographic Plate No. 13). The first of these shovel tests yielded two (2) waste flakes. The second shovel test yielded three (3) waste flakes and the third shovel test was sterile. Through these three shovel tests, the soil revealed were relatively undisturbed and consisted of twenty (20) cm. of dark brown clay humus on top of twenty (20) cm. of grey sandy clay over sandy gravel. The soils west of the third shovel test are heavily disturbed by bulldozing and vary from thirty to sixty (30-60) cm. of brown humus mixed with sand over sandy gravel mixed with clay. No artifactual materials were recovered from these shovel tests of the bulldozed area.



Photographic Plate No. 13: 110° - Showing the area where flakes were recovered. Note H.C. Pedersen and T. O'Brien working on a shovel test unit in the left and solar powered weather station in center midground. This area is possibly the northern portion of the Lamb V site (Sc-25).

A sixth fifteen (15) meter interval transect of 50x50 cm. shovel tests was conducted fifteen (15) meters south and parallel to the fifth transect. This transect began five (5) meters south and due west of the weather station. The first shovel test was sterile. The second shovel test which is located fifteen (15) meters south of the fifth transect shovel test #1 yielded chert and quartzite flakes. Shovel test #3 which is located fifteen (15) meters south of the fifth transect, shovel test #2, yielded one (1) yellow Jasper Primary core flake. Shovel test #4 of this transect was sterile and appeared to be located on the eastern perimeter of an area which has been striped of top soil from bulldozing. The soils in the first three shovel tests of this transect were relatively undisturbed and consisted of twenty-five to thirty (25-30) cm. of dark brown clay humus on top of tan sandy gravel mixed with clay. The soil found in shovel test #4, consists of 17 cm. of brown sand and clay humus over tan sand mixed with a large amount of mottled yellow clay. Shovel tests 5-8 were all sterile and heavily disturbed by bulldozing. The soils revealed through shovel testing in this area consisted of five to ten (5-10) cm. of clay and humus on top of yellow clay subsoil.

The fifth and sixth shovel testing transects employed selective shovel testing and continuous soil probe core examinations to the south of the sixth transect (AFS File Transect 2084H-2-6.1). These selective tests were conducted to determine the size and extent to which artifacts were present south of the positive shovel tests and also, to determine the size and extent of the bulldozing disturbance. No artifactual materials were found throughout this portion of the testing, which indicates a site boundary of approximately thirty by thirty (30x30) meters.

The boundaries of the relatively undisturbed soils associated with the artifactual materials found, is approximately forty-five by sixty (45x60) meters and is bordered to the east, west, and south by disturbance. To the north of the fifth transect shovel tests 1 and 2 is a swampy lowland terrace which is presumably the second terrace of the Lamb V Site (Sc-25). According to the Kerr report (1965), the second and third terraces (now the second terrace) were planted in corn at the time of his survey and the majority of the Lamb V Site artifacts were surface finds from the first (now submerged) and second terraces.

There is a strong possibility that these artifacts represent the southern extent of Sc-25 or are an associated find spot.

The survey of control area #2 continued atop the bluff on a small portion of Corps-owned property located north of the southern section line, Section 31, one-third of a mile due west of the boat ramp discussed earlier in this chapter (see Figure 3). Testing in this area included a fifteen (15) meter interval of 50x50 cm. shovel testing transect (AFS File Transect 2084H-2-7) accompanied by continuous soil probe core examinations and the entire area was surface examined at a ten to fifteen (10-15) meter interval. The soils in this area appear to be cultivated through to subsoil, and consist of twenty (20) cm. of brown humus mixed with mottled grey to tan clay over ten to twelve (10-12) cm. of grey to tan clay on top of dolomite bedrock. No artifactual materials were recovered from this area.

The Corps boundary line extends down off the bluff in the northern portion of this area and returns to the bluff again, encompassing a rather flat area east and adjacent to a draw. This portion of the bluff was tested in the same manner as the area just discussed (AFS File Transect 2084H-2-8) atop the bluff. The soils, revealed from shovel testing, varied considerably. The soils near the edge of the bluff consist of ten (10) cm. of clay and humus mix over thirty (30) cm. of greyish yellow clay on top of rock and gravel. The soils change at approximately the 1100' elevation to ten (10) cm. of dark black humus and clay composite over greyish yellow clay mixed with chert and gravel. Above the 1050' elevation, there is no topsoil present with exposed yellow clay combined with fractured chert. No artifactual materials were recovered from this site.

The portion of this bluff south and adjacent to the draw appeared to be a former pasture and has a 3-5° slope to the steep slopes of the draw itself (see Photographic Plate No. 24). The testing conducted was the same as that in the area just discussed (AFS File Transect 2084H-2-9). The soils revealed through shovel testing consist of twenty to twenty-two (20-22) cm. of brown humus and sand over clay and dolomite. No artifactual materials were recovered from this area.



Photographic Plate No. 24: Showing a general view of the bluff area south of the draw in the north-west corner on control area #2. G. Joseph Hudak and H. Clyde Pedersen are beginning a shovel test unit on a 3-5° sloping pasture.

The area north of the draw was planted in corn and the soils were plowed through to subsoil (see Photographic Plate No. 25). The corn patch was surface examined employing continuous soil probe core examinations to locate possible hidden soil horizons. The edge of the bluff was covered with dense vegetation. Only soil probe core examinations were utilized on the edge of the bluff due to the steepness of it's slope. No artifactual materials were recovered from this area.



Photographic Plate No. 25: Showing a general view of the draw and bluff area north of the draw in the northwestern corner of control area #2. Note the cornfield in center midground sloping to the steep slopes of the bluff.

Control Area #3 - Section 31 T28N R15W

There are four (4) sites associated with this control area. By number they are Sc-14, Sc-15, Sc-28, and Sc-32.

Sc-14, is either inundated by the Eau Galle Reservoir or has been buried under the sand pit which is presently located at the confluence of the Eau Galle River and the reservoir.

Sc-15 is located one hundred (100) feet west of Sc-14 and was not found by fifteen (15) meter interval shovel testing.

Sc-28, is inundated and probably destroyed by the conservation pool borrow area north of the swimming beach.

Sc-32, is located near the confluence of the French Creek and the Eau Galle River. The State Historic Preservation Office file states that although the site could not be located, it is destroyed by the Eau Galle Reservoir.

Our survey of control area #3 began at the confluence of the French Creek and Eau Galle River. The terrain adjacent to this confluence is extremely low, swampy, and covered with 5-7" of nettles. The soils consisted of redeposited silt and clay, which were saturated

with water. This created difficult to impossible subsurface testing conditions.

East of this lowland terrace is a five to eight foot (5-8') eroding bank on the edge of an upland. At this point, there is a large, recent historic trash pile from a homestead on the upland, deposited on the lowland terrace. No testing of the trash pile was accomplished other than visual examination at ten (10) meter intervals.

The upland area west of and including a farm road (see photographic plate No. 14) was fairly undisturbed and apparently a former pasture. The testing employed in the area, included one fifteen (15) meter interval transect of 50 x 50 cm. shovel tests (AFS File Transect 2084-H-3-1) west and adjacent to an ungraveled road (not shown on map) as well as one fifteen (15) meter interval transect of 50 x 50 cm. shovel tests (AFS File Transect 2084-H-3-2) across a small rise east of the ungraveled road. Additionally, the entire area was surface examined at fifteen (15) meter intervals. The road cuts were visually examined at five (5) meter intervals.

The soils in this area (revealed through shovel testing) consist of twenty to forty (20-40) cm. of brown sandy humus on top of yellow and tan sand. No artifactual materials were recovered from this area.



Photographic Plate #14 - 315°: Showing a general view of the terrain on the upland southeast of the confluence of French Creek and the Eau Galle River. G. Joseph Hudak and T. O'Brien Shovel testing along an ungraded road with AFS, field vehicle in right of picture

Our survey continued southeast of this upland area towards the picnic grounds and sand pit area. The portion of land between this upland area and the picnic grounds in the west central portion of control area #3 is a former gravel pit and borrow area. The terrain consists of large depressions and almost totally exposed soils. Testing in this area consisted of two (2) fifteen (15) meter interval transects of 50x50 cm. shovel tests, one running north to south (AFS File Transect 2084H-3-3), the other west to east (AFS File Transect 2084H-3-4), and crossing in approximately the middle of this area. The entire area was surface examined at fifteen (15) meter intervals employing continuous soil probe core examinations to insure that no hidden cultural horizons were buried beneath the exposed till. The soils were extremely thin and only present in limited areas.

The rest of the area contained exposed tan rock gravel and sand till. Some recent historic debris was found as well as a possible former road. No artifactual materials were recovered from this area.

The survey continued east of the gravel pit area, within the picnic grounds. This area has been landscaped including tree and sod planting. Other disturbances include road construction and former homestead construction.

The testing of this area included one fifteen (15) meter interval transect of 50x50 cm. shovel tests (AFS File Transect 2084H-3-5), south to northwest and adjacent to the park road. Also the entire area was surface examined at fifteen (15) meter intervals as well as five (5) meter surface examination of road cuts. The soils, revealed from the shovel tests, varied considerably. On the south end of the transect, the soils consisted of five (5) cm. of black sandy humus on top of fifteen (15) cm. of grey and tan mottled clay over tan sandy gravel. In the middle of the picnic area, the soils consisted of twenty (20) cm. of brown humus with mottled brown clay, on top of twenty (20) cm. of yellow sand and clay over tan sand and gravel. The soils in the north portion of the picnic area where a former homestead was located consisted of exposed tan sandy gravel till, mixed with small amounts of brown humus in some areas. No artifactual materials were recovered in this area.

The survey continued with a fifteen (15) meter interval transect of 50x50 cm. shovel tests (AFS File Transect 2084H-3-6), primarily east to west adjacent to and north of the meandering shoreline of the Eau Galle River, from the easternmost edge of the sand pit to the gravel pit area. In addition, fifteen (15) meter interval surface examination transects were walked adjacent to the shovel tests, as well as a ten (10) meter interval visual examination, where possible, of the eroding banks of the Eau Galle River.

CULTURAL RESOURCES INVESTIGATION OF EAU GALLE RESERVOIR 2/2
PIERCE AND ST CRO. (U) ARCHAEOLOGICAL FIELD SERVICES
INC STILLWATER MN G J HUDAK MAY 85 DACW37-80-D-0045

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The sand spit portion of this transect (see Photographic Plate No. 20) has been disturbed by erosion, redeposition and gravel road construction.

Shovel testing revealed that the soils varied considerably from the sand spit to the southern edge of the picnic grounds. The soils found in the sand spit, consist of eight (8) cm. of brown clay humus over twenty (20) cm. of tan sand and gravel on top of ten (10) cm. of black sand over twenty (20) cm. of blue green sand over tan sand.

The soils in the south end of the picnic area, revealed five to twenty (5-20) cm. of black sand and humus over fine tan to brown sand. The surface examination of the sand spit revealed an intensity of fractured chert present, probably deposited there with the gravel during road construction. No artifactual materials were recovered from this area.



Photographic Plate No. 20: 95° - General view of the sand spit area with AFS, Inc. field vehicle in left, T. O'Brien in center left, Corps campground atop bluff in center background, G.J. Hudak and Corps archaeologist Dave Berwick overlooking the Eau Galle River in right midground. Note trash recepticals in right foreground and center midground representing a portion of the picnic ground development disturbance.

Control Area #4 - Section 31 T27N R15W

There are four (4) sites associated with Control Area #4. By number they are Sc 20, 21, 22, 35.

Sc 20, Sc 21, and Sc 22 are grouped together on a lowland east and adjacent to the bluff upon which the Corps campground is present and west and adjacent to Lousy Creek. All the diagnostic artifacts were found on the surface while the field was planted in corn. It is now covered with swamp grasses and weeds.

Sc 35 is located on a sloping lowland south and adjacent to the bluff upon which the Corps campground is present and north of the former County Road. This site has been designated in the State Historic Preservation Office as being destroyed by the Eau Galle Reservoir. AFS, Inc. feels that this site has not been destroyed.

The survey began upon the bluff which is now totally used as the Corps of Engineers Campground facility. Most of the bluff has been developed for this purpose and is extensively disturbed. This disturbance includes an asphalt road leading to individual camping pads, restroom facilities, including underground sewer pipes and electric cables, as well as compsite pad construction consisting of graveling and permanent concrete fireplaces.

In the area where camping pad development is present, no systematic shovel testing transects were recommended due to the asphalt road, gravel fill campsites and the extremely steep slopes of the bluff. Subsurface testing was employed (AFS File transect 2084-H-4-1) between camping pads (see photo plate #19) using continuous soil probes, where possible. The surface examination was focused around the perimeters of the campsites and other disturbed areas because of the excellent surface visibility and exposed soils. Surface visibility inbetween the pads was generally poor due to vegetational overgrowth. Shovel testing revealed that the soils varied considerably in this area. The majority of the soils atop the bluff consisted on 10-20 cm. black loam and humus on top of fine brown to tan sandy clay. In some areas, the soils were more disturbed and consisted of five to seven (5-7) cm. of black loam and humus on top of thirty (30) cm. of tan and brown loam with mottled clay over rocky yellow till. The surface examination disclosed fractured chert present in the redeposited gravel apparently caused by a rock crusher.

No artifactual materials were recovered in the area developed for camping pads.



Photographic Plate #18 - 335°: General overview of Control Area #4 including both lowland areas adjacent to the bluff.



Photographic Plate #19 - 145°: View of general terrain between the developed camping pads up on the bluff in Control Area #4. H.C. Pedersen and T. O'Brien shovel testing in the center.

A playground and movie viewing area is located in the east central portion of the bluff. This area was subsurface tested, employing a fifteen (15) meter interval transect of 50 x 50 cm. shovel tests (AFS File 2084-H-4-2) conducted north to south. The entire playground area was surface examined at 15 meter intervals, avoiding the playground equipment. Continuous soil probe core examinations were utilized throughout. The soils displayed through shovel testing, 25 cm. of brown humus with tan sand over brown to tan sand. To the south of the playground is a small field and to the west of this field is a swamp. A fifteen (15) meter interval transect of 50 x 50 cm. shovel tests (AFS File 2084-H-4-3) accompanied by a fifteen (15) meter interval surface examination was conducted east to west. The soils in the field consisted on 18-20 cm. of brown humus on top of 20 cm. brown humus mottled with brown sand over brown and tan sand. The soils found in the swampy area consist of 40 cm. black silty clay with dappled brown sand over tan sand. No artifactual materials were recovered in this area.

There are some undeveloped campsites found in the west central portion of the bluff. These campsites have been minimally disturbed by trail construction, a small amount of camping pad leveling and brush removal. These areas were individually tested including surface examination and 50 x 50 cm. shovel testing, (AFS File Transect 2084-H-4-4) where possible. The shovel testing revealed extremely thin soils consisting of five to ten (5-10) cm. of brown sandy humus over grey to tan sand.

The survey of Control Area #4 continued on the lowland east and adjacent to the bluff and west and adjacent to Lousy Creek. The terrain of this lowland is generally swampy with one small rise on the southern portion sloping from the bluff. The testing employed consisted of two fifteen (15) meter interval transects of 50 x 50 cm. shovel tests, accompanied by fifteen (15) meter interval surface examination transects. Soil probes were also utilized throughout this area. The first shovel testing transect (see photo Plate #21, AFS File transect 2084-H-4-5) north to south along the mowed nature trail: from the northern portion of this lowland to the rising talus slope near the southern portion. The second (see photo plate #22 AFS File Transect 2084-H-4-6) ran southeast down the talus slope towards the Corps of Engineers boat landing located across Lousy Creek in Control Area #5. The soil depth varied according to the elevation above the water level. All of the shovel tests with the exception of those placed upon the talus slope revealed soils consisting of wet, black, silty clay down to water. The water level varied in depth from the surface, thirty five to eighty (35-80) cm. The soils on the talus slope were much dryer and changed in makeup to 10-20 cm. of brown sandy loam on top of tan clay. No artifactual materials were recovered from this lowland.

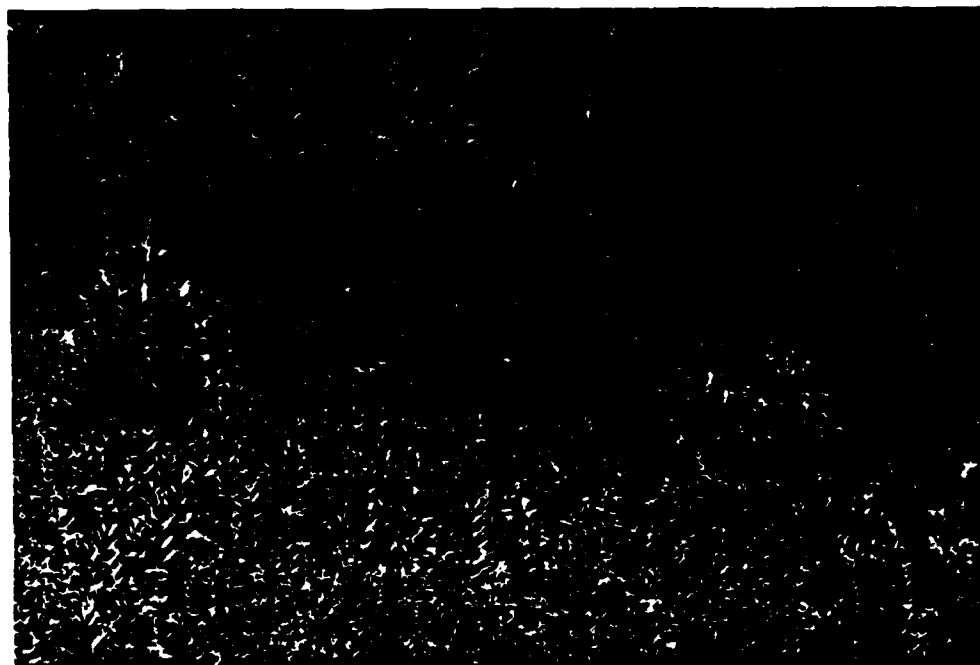


Photographic Plate #21 - 220°: View of terrain located on lowland east and adjacent to campground bluff. T.O.B. and H.C.P. shovel testing nature trail on a north/south transect. Note low swampy ground with talus slope in right background lead- to steep slope of bluffs in far right.



Photographic Plate #22 - 315°: G.J.H. and T.O.B. shovel testing along a southeasterly transect from talus slope. Note the trail leading up to the campground along the steep slope.

The survey of Control Area #4 continued on the sloping lowland southwest and adjacent to the bluff upon which the Corps Campground is present and north and adjacent to the former county road (see photo plate #26). The area has been heavily disturbed from cultivation, tree planting, and ditching from the former county road construction. The testing in this area included one fifteen (15) meter interval transect (AFS File transect 2084-H-4-7) of 50 x 50 cm. shovel tests west to east through the center of the lowland. Additionally, the area was surface examined at fifteen (15) meter intervals, focusing on the road cut and other exposed soils. The soils revealed by shovel testing and substantiated with continuous soil probes consisted of ten to twenty five (10-25) cm. of black silty humus mottled with brown clay over tan clay and rocks. Surface visibility was generally poor due to heavy vegetational ground cover. No artifactual materials were recovered from this area.



Photographic Plate #26 - 0°: General view of lowland southwest and adjacent to bluff upon which Corps campground is located. Note tree planting in left, steep slopes in background and G.J.H. beginning a shovel test unit in center midground.

Control Area #5

Two sites associated with the Lohn Creek portion of Control Area #5 bear State numbers and names: Sc 11, Larson III, and Sc 23, Larson IV.

Sc 11, Larson III, is located on the lowland adjacent to the bluff in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 32 south and east of Lohn Creek which is buried under spoil from dam construction and not included in our survey area.

Sc 23, Larson IV, is located on the south bank of Lohn Creek in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 32. This area is presently buried under spoil from dam construction.

The survey of this control area began with a surface examination of the flood plain east and adjacent to Lousy Creek. This portion of the survey started from the northern border of the project area and continued south, encompassing all of the lowland below the bluff, and terminated at Lohn Creek. Construction from County Road NN has extensively disturbed the shoreline north of and including the Corps of Engineers boat ramp and parking lot.

The soils in this area mainly consist of clay and dolomite gravel fill. This portion of the survey was surface examined at five (5) meter intervals. The boat landing area (located at the point where County Road NN now terminates) has been flattened and covered with yellow dolomite gravel for a parking lot. Traces of the yellow gravel are found in the soils along the adjacent shoreline and continue into the water. A very small silt and clay mud flat is located south and adjacent to the boat landing area. Shovel testing was not possible due to extreme water saturated soils. This area was surface examined at five (5) meter intervals and no cultural materials were located.

South from this mud flat to Lohn Creek, steep slopes from the bluff run directly into the water. A small amount of erosion is present along these slopes and were visually examined where possible.

The survey of the Lohn Creek portion of this control area (see Photo Plate #23) began on the northern shore of the creek where it flows into the Reservoir. At this point there is a small amount of sandy lowland adjoining the steep slopes. This area was surface examined where possible but no subsurface testing was accomplished due to reservoir inundation and dolomite spoil areas. The terrain throughout the rest of the northern shore within our survey area consists of steep eroding banks down to the water line. These eroding banks were examined where possible at the water line. The boundaries of our survey did not include any portion of the bluff in this area. No artifactual materials were recovered from the northern shore of Lohn Creek.

The survey of the southern shore of Lohn Creek and accompanying lowland began at the northwestern boundary of Control Area #5 and con-

tinued southwest to the main body of the reservoir and continued south to the permanent dam. The entire lowland to the steep slopes of the bluff has been redeposited with spoil from the dam construction. No shovel testing was warranted though continuous soil probes at thirty (30) meter intervals were employed throughout the entire lowland area to insure that the entire area was disturbed. These soil probes were also utilized to determine what areas were disturbed by dam construction and therefore out of our survey scope of work. No artifacts were recovered in this lowland area.



Photographic Plate #23 - 10°: General terrain of Lohn Creek portion of Control Area #5. Note the eroding banks with Corps property marker at the waterline in left of photo.

The survey of the bluff portion of Control Area #5 began in the southeast corner of the control area north and adjacent to the Corps Overlook on the east side of the permanent dam in Control Area #1. The terrain in this area consists of a small portion of heavily wooded upland sloping to the edge of the bluff where the slope becomes quite steep.

No systematic transects were conducted in this area due to the dense stand of trees, however, the majority of the area between the trees was surface examined. Selective 50 x 50 cm. shovel testing (AFS File transect 2084-H-5-1) as well as soil probes were employed to gain a sample of subsurface soils.

The surface visibility was generally poor due to dense ground vegetation. However, some exposed soils are present in limited areas

from rodent burrowing trails and erosion. All of the exposed soils were examined for cultural materials. The shovel testing revealed soils of ten to twenty (10-20) cm. of brown sandy humus followed by clay, gravel till and rock. No artifactual materials were recovered from this bluff area.

The bluff area survey continued on the north side of the mouth of Lohn Creek. The terrain and vegetation within this area were similar to that just discussed. The survey methodology and results were also the same.

The survey of the bluff area continued approximately one quarter of a mile due north of Lohn Creek at a draw located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 32. The draw is fairly steep and has been heavily eroded. The floor of the draw appears to be a creek bed during spring run off and contains very little soil and quite a few rocks and boulders. These banks were surface examined where possible. No subsurface testing was possible within the draw. No artifactual materials were recovered.

Next the bluff area north and adjacent to this draw was tested. The terrain and vegetation consisted of relatively steep slopes with extremely thick pine stands. The testing involved surface examination where possible with selective 50 x 50 cm. shovel testing (AFS File transect 2084-H-5-2) and repeated soil probes. The soils revealed in the shovel testing, consisted of twenty (20) cm. brown sandy humus followed by twenty (20) cm. tan clay and gravel over dolomite bedrock. No artifactual materials were recovered from this area.

There is an old roadbed located on the south side of the draw which runs from County Road NN east to the top of the bluff. There are some eroding cut banks with exposed soils along both sides of the road which indicate heavy disturbance from the construction of the roadbed. A density of natural chert was found eroding out of the roadbed and cut banks.

To the south of the draw and on top of the bluff (see photo plate #29), the area is fairly flat. Dense vegetational ground cover caused surface visibility to be poor at the time of this survey. A stand of ash trees and elder brush covered the bluff. This entire bluff area was surface examined at ten (10) meter intervals as well as one fifteen (15) meter interval 50 x 50 cm. shovel testing transect (AFS File transect 2084-H-5-3). This testing was accompanied by continuous soil probes. The soils in this area consisted of twenty (20) cm. grey sand and clay followed by clay and gravel subsoils. No artifactual materials were recovered from this area.



Photographic Plate #29 - 0°: A general view of the bluff portion of Control Area #5, south of the road-bed and draw. H.C.P. in center of photograph utilizing radio communication for field note documentation.

Control Area #6 - Section 6 T27N R15W

Control Area #6 is located south of the Eau Galle Reservoir and west of the town of Spring Lake. This control area encompasses the area designated for the Mines Creek Emergency Spillway Area.

AFS, Inc.'s survey of Control Area #6 began south and adjacent to the Eau Galle Reservoir at the northern edge of the spillway. This area has been totally destroyed by dynamite blasting and road construction. Upon examination of both sides of the blasted trench, a high intensity of fractured chert was found similar to that found throughout the Reservoir. South of this trench, the terrain changes to a natural stream bed (see photo plate #27). This stream which is very similar in appearance to a gully has large rock and boulder rip rapping within the stream bed, eroding banks and extensively steep slopes on both sides.

The stream bed was surface examined at five (5) meter intervals and soil probes were employed continuously throughout the redeposited lowland. Several types of rocks were found within the stream bed including chert, jasper, and iron concretions. Several chert and jasper nodules were found fractured which gave the appearance of having been purposely worked. However, there were several frac-

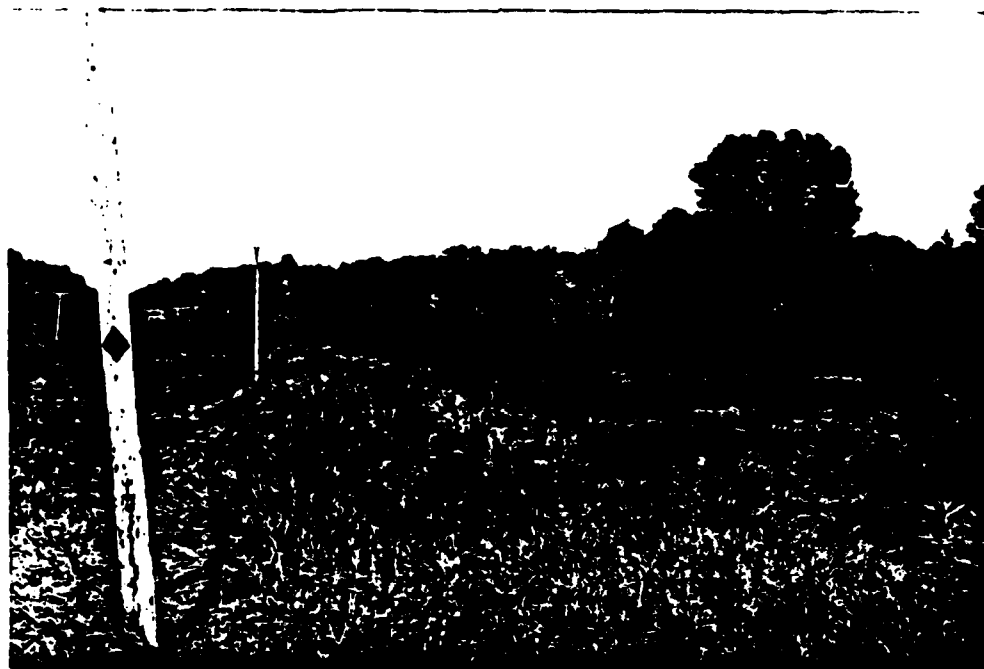
tured nodules which were embedded in large chunks of dolomite. It is quite apparent that these fractured pieces occur naturally and are not man made. The soils present on the redeposited lowland are thin in many areas and consist of five to thirty (5-30) cm. of black silt and clay on top of fine brown beach sand. No artifactual materials were recovered from this portion of the spillway.



Photographic Plate #27 - 190°: General view of northern portion of Mines Creek Emergency Spillway Area, south of road with T.O.B. taking notes within the creek bed in right center of photo. Note redeposited lowland on both sides of creek with steep banks to the bluff in far right.

Approximately one half a mile south of the blasted trench, the terrain changes again. At this point, the project area widens considerably, encompassing Mines Creek and the adjacent area up to the 800' elevation (see photo plate #28). The terrain consists of the Mines Creek River bed, with redeposited soils. Several portions of this project area have been disturbed. This disturbance includes seasonal flooding from Mines Creek, a built up railroad bed running south of and parallel to Mines Creek, County Road B construction on the southern border of the Project Area, homestead, power and telephone line construction, farming use, concrete spillway construction, and several areas of rodent disturbance. Also there are several small eroding banks on either side of Mines Creek adding to the present disturbance.

Testing of the area included fifteen (15) meter interval surface examination transects, focusing on the exposed soils next to the creek bed, eroding banks and rodent burrow piles, as well as one fifty (50) meter interval 50 x 50 cm. (AFS File transect 2084-H-6-1) shovel testing transect running west to east along the re-deposited soils of the lowland. Soil probes were employed between shovel tests and throughout this portion of the survey area to insure that no cultural horizons were present below the redeposition. The soils present along this area vary from exposed gravel and sand till to forty (40) cm. of brown humus mottled with tan clay over sandy gravel till. No artifactual materials were recovered from this area



Photographic Plate #28 - 270°: General view of the southern portion of the Mines Creek Emergency Spillway Area. Note the telephone and power lines in the left, railroad bed in the center, and exposed sandy soils on the right.

VI INVESTIGATION RESULTS

The known site records filed with the State Historic Preservation Office and Museum of Anthropology-State Archaeologist's Office are presented in Section C, Chapter 4.

The following discrepancies in the known archaeological site records are organized by site number. These discrepancies were of a number that it seemed advisable to separate them from the known site records currently on file in the above offices. The following reference to Kerr is his 1965 report. Some of the discrepancies occur between the State Historic Preservation Office records and the Wisconsin Archaeological Codification File records in the Museum of Anthropology.

1. FLINT OR CHERT

Sc 13 - Kerr reported on page 58 that "five flint flakes" were found.

Sc 12 - Kerr reports on page 58 that the 1962 survey team found "four flint flakes".

Sc 14 - Kerr reports on page 59 that "15 flint flakes" were found.

Sc 15 - Kerr reports on page 59 that "12 flint flakes" were found.

Sc 16 - Kerr reports on page 60 that 1962 survey found "50 flint flakes".

Sc 19 - Kerr reports on page 61 and 62 that 1962 survey found "22 flint chips".

The 1964 survey found "9 chert flakes", but NO flint.

Is it possible that chert flakes were identified as flint? If not, what type of flint are the flakes?

2. Sc 20 - Kerr reports on page 62 that one surface find projectile point was found in a corn field in 1962. Even though no additional artifacts were found in 1964, Kerr recommends "extensive testing". On the basis of one projectile point and no other debitage, the SHPO records indicate the site is a "campsite". Kerr locates the site as being "90 feet north of a right angle bend in Lousy Creek", which cannot now be located, as which right angle bend is not identified.

3. Sc 21 - Located by Kerr on page 62 as being 100 feet west of bend in creek and 200 feet SW of Sc 20. This bend cannot be the same bend as described in Sc 20.

Kerr reports that the 1962 survey found "17 flint flakes" in one test pit. Nothing was found in surrounding test pits.

SHPO records the site as being "east of Lousy Creek", which contradicts Kerr's field sketch and measurements, which show the site to be west of the Lousy Creek.

4. Sc 22 or Sc 23? NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31 T28N R15W

Kerr's field sketch indicates this as Sc 23, as does his report on page 63. However, the SHPO lists it as Sc 22. The SHPO description of Sc 23 as being located on "the South bank of Lohn Creek".....not the west bank of the Lousy Creek.

We believe that Kerr's report, page 63 and the field sketch are in error and the site should be Sc 22. Kerr locates this site as being "100 feet west of the gate and 120 feet north". The gate no longer exists and cannot be located. The site was based on "6 flint flakes" found in a single test pit and nothing was found in surrounding tests.

5. Sc 24 - SHPO cards indicate the site to be "on bluff 100 yards north of Lamb house". Kerr reports the location to be 50 yards north of Lamb's house. Fifty (50) yards puts the site on the south slope of the bluff. One hundred (100) yards comes close to the north slope of the bluff. SHPO records further indicate that the site was destroyed by the Eau Galle Reservoir. Does not indicate how. It was not submerged and the area does not seem to be borrowed from or used for fill.

6. Sc 27 - SHPO cards indicate the location of Sc 27 is the SW $\frac{1}{4}$ SE $\frac{1}{4}$, 200 yards north of Sc 26, but SHPO locates Sc 26 as being in the SE $\frac{1}{4}$ SW $\frac{1}{4}$, which does not place Sc 26 south of Sc 27. Kerr's report locates Sc 27 as being the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 31 T28N R15W.

7. Sc 32 - Kerr reports on page 67 that the site is "120 yards west of the low water bridge"...and further states that the "exact location of this site could not be determined". SHPO files locate the site as being "150 yards west of the low water bridge"...SHPO records further indicate that the site has been destroyed by the Eau Galle Reservoir. How was this site determined to be destroyed when it could not be exactly located? The area does appear to be inundated, borrowed from or used for disposal.

8. Johnson 2 Sc 24 or Johnson 2 Sc 34 - Kerr report on page 9 lists two sites partially excavated: Lamb 5 Sc 25 and Johnson 2 Sc 24. Page 35 describes it as Johnson 5 Sc 34. The legal description and the SHPO records indicate that the correct description is Johnson 2, Sc 34. We believe that the page 9 site number is a typographical error and the location indicates that it is outside of the AFS, Inc. survey.

9. Sc 35 - Wisconsin Archaeological Codification File describes this as located on the SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 31, T28N R15W, which is an illogical description and probably a typographical error. SHPO records describe it as the SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 31 T28N R15W. Both records indicate that the site has been destroyed by the Eau Galle Reservoir, but if located where described it would not have been inundated, borrowed from or used for disposal.

10. Sc 25 - Wisconsin Archaeological Codification File indicates that the site has been destroyed by the Eau Galle Reservoir. SHPO files do not make that statement. We believe that we have relocated Sc 25 or a site in close association with it.

11. Sc 13 - The Wisconsin Archaeological Codification File legal description indicated Section 32. It should be located in SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 31.

12. SHPO file indicated A. D. Buck did the archaeological survey of the Reservoir in 1962. WACF indicates that Buck reported the sites in 1963. Except for Sc 9 which was reported in 1932.

13. Kerr's map on page 71, labeled Figure 2, does not include the location of Sc 35.

VII. RECOMMENDATIONS

Within the Corps of Engineers Eau Galle Reservoir there are 18 recorded prehistoric sites, of which seven (7) are listed by the Wisconsin SHPO as being "destroyed by the Eau Galle Reservoir". Two additional sites were located in what became the conservation pool borrow area and are now inundated. From the nine sites that are not listed as being destroyed, Kerr and Buck recovered five (5) projectile points or parts of points, one (1) scraper, two (2) core knives, one (1) core, fifty nine (59) "flint" flakes, one (1) worked sandstone, twelve (12) bone fragments, numerous chert flakes, and numerous flakes.

A. Archaeological Sites in our Project Area

Area #1 - No recorded sites

Area #2

- Sc 9 Destroyed by borrow area and inundated
- Sc 10 Destroyed by borrow area and inundated
- Sc 12 4 "flint" flakes (surface)
- Sc 13 5 "flint" flakes (surface)
- Sc 24 Stem section of a point, 1 scraper, 1 core
numerous flakes (surface)
- Sc 25 Indicated by SHPO as destroyed by Eau Galle
Reservoir
- Sc 26 Indicated by SHPO as destroyed by Eau Galle
Reservoir
- Sc 27 Indicated by SHPO as destroyed by Eau Galle
Reservoir

Area #3

- Sc 14 15 "flint" flakes, 12 bone fragments (surface)
- Sc 15 1 projectile point, 12 "flint" flakes, 1
worked sandstone (surface)
- Sc 28 Indicated by SHPO as destroyed by Eau Galle
Reservoir
- Sc 32 Indicated by SHPO as destroyed by Eau Galle
Reservoir

Area #4

- Sc 20 1 projectile point (surface)
- Sc 21 17 "flint" flakes (excavated)
1 projectile point, 2 core knives, 28 flakes
(surface)
- Sc 22 6 "flint" flakes (excavated)
- Sc 35 Indicated as being destroyed by Eau Galle
Reservoir by SHPO

Area #5

- Sc 11 1 projectile point, 167 chert flakes (excavated)
- Sc 23 Indicated by SHPO as destroyed by Eau Galle
Reservoir

Area #6 - No recorded sites

B. Site by Site Recommendations

Area #2

Sc 9 SHPO records should be changed to show this site as being "destroyed by conservation pool borrow area and now inundated."

Sc 10 Same as Sc 9.

Sc 12 SHPO records should show that the site has been totally destroyed by landscaping, bulldozing, parking lot paving.

Sc 13 SHPO records should show that the site has been destroyed by bulldozing and playground construction.

Sc 24 While there is a major discrepancy in the distance descriptions from the Lamb house, both locations would put the site in heavily bulldozed areas and on a cut trail along the Eau Galle Reservoir. It is also possible that the direction was wrong and should have read "on a bluff 100 yards northwest of Lamb house". 50 x 50 cm. shovel tests at 15 meter intervals were negative on the bluff. Shovel tests of the same size and interval 50 yards north of the Lamb house were also negative. 100 yards north of the Lamb house no testing was done as this is a graded trail area.

Sc 25 Although this site is listed on the SHPO records as being destroyed, it is more likely simply inundated and if the water level is ever lowered, this site may again be available for study.

Sc 26 Although this site is listed as being destroyed on the SHPO records, it is possible that it has simply been buried by the disposal area.

Sc 27 Same as Sc 26.

Area #3

Sc 14 This site is probably inundated. 50 x 50 cm. shovel tests at 15 meter intervals were negative.

Sc 15 50 x 50 cm. shovel tests at 15 meter intervals were negative.

Sc 28 Site is inundated and probably destroyed by the conservation pool borrow area.

Sc 32 Although this area is listed as destroyed by the SHPO records and there is a distance discrepancy between Kerr's report and the SHPO records, both locations do not appear to be destroyed by the Reservoir. 50 x 50 cm. shovel tests across both areas were negative. Because of the scarcity of artifacts found, this should be reduced to a "find" area.

Area #4

Sc 20 A site number was assigned to this area on the basis of one surface found projectile point and SHPO records this as a "campsite". This should be reduced to a "find" spot. 50 x 50 cm. shovel tests at 15 meter intervals were negative.

Sc 21 A continuation of the transect from Sc 20 proved negative.

Sc 22 50 x 50 cm. shovel tests at 15 meter intervals were negative. Only 6 "flint" flakes were recovered in this area by Kerr and surrounding tests were negative.

Sc 35 Contrary to the SHPO records indicating that this site has been destroyed by the Eau Galle Reservoir, it has been heavily disturbed by cultivation and county road ditches. The site lies above the reservoir water level and is not in the borrow area. 50 x 50 cm. shovel tests across the area at a 15 meter interval were negative. This should be reduced to a "find" spot.

Area #5

Sc 11 Because of the lack of a clear description of the location of this site, we could not locate it. We do believe from the vague information given that the site is either out of the Corps property and/or buried by the dam disposal area.

Sc 23 This site is indicated on the SHPO records as being destroyed by the Eau Galle Reservoir. However, it may just be buried in the dam disposal area.

C. Historic Sites in the Study Area

Recommendations on standing structure sites located in the Study Area and Control Area 6 can be found in Chapter 4, Section B, along with photographs and site location maps.

D. General Recommendations

1. We observed naturally occurring split chert nodules and flakes which may have been mistaken by previous surveyors for prehistoric cultural material occurring over the entire reservoir. Re-examination of existing artifact collections from Eau Galle sites may indicate that some of the cultural materials are naturally occurring chert and not site areas. This was partially confirmed in discussions with the Wisconsin State Archaeologist. (Berwick: personal communication; 1981, AFS, Inc. Field notes: 2084-H, 1981).

2. A variety of discrepancies in the known archaeological site records and previous investigations were discovered during the course of the present work. Consultation is recommended between the State Archaeologist's Office and State Historic Preservation Office to reconcile the known site records in the two record systems and to reevaluate site classifications into the categories of actual documented sites, find spots, and/or natural chert occurrences.

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Appendix A

SCOPE OF WORK

SCOPE OF WORK
CULTURAL RESOURCES INVESTIGATION
OF EAU GALLE RESERVOIR
APPENDIX A

1.00 INTRODUCTION

1.01 The Contractor will undertake a cultural resources reconnaissance inventory of Corps-owned lands in and adjacent to Eau Galle Dam and Reservoir.

1.02 This cultural resources inventory is in partial fulfillment of the obligations of the St. Paul District regarding cultural resources, as set forth in the Historic Preservation Act of 1966 (P.L. 89-665), the National Environmental Policy Act of 1969 (P.L. 91-190), Executive Order 11593 for the Protection and Enhancement of the Cultural Environment (13 May 1971, 36 F.R. 8921), the Archaeological Conservation Act of 1974 (P.L. 93-291), the Advisory Council on Historic Preservation's "Procedures for the Protection of Historic and Cultural Properties" (36 C.F.R. Part 800), the Department of the Interior's guidelines concerning cultural resources (36 C.F.R. Part 60), and Corps of Engineers Regulations (ER 1105-2-460) "Identification and Administration of Cultural Resources" (Federal Register, 3 April 1978).

1.03 The above mentioned laws establish the importance of Federal leadership, by the various responsible agencies, in locating and preserving cultural resources within project areas. Specific steps to comply with these laws, particularly as directed in P.L. 93-291 and E.O. 11593, are being taken by the Corps "...to assure that Federal plans and programs contribute to the preservation and enhancement of non-federally owned sites, structures and objects of historical, architectural, or archaeological significance." A part of that responsibility is to locate, inventory, and nominate to the Secretary of the Interior all such sites in the project area that appear to qualify for listing on the National Register of Historic Places.

1.04 The Executive Order further directs Federal agencies "...to assure that any federally owned property that might qualify for nomination is not inadvertently transferred, sold, demolished or substantially altered." In addition, the Corps is directed to administer its policies, plans and programs in such a way that federally and non-federally owned sites, structures, and objects of historical, architectural, or archaeological significance are preserved and maintained for the inspiration and benefit of the people.

1.05 This cultural resources investigation will serve several functions. The report will be a planning tool to aid the Corps in meeting its obligations to preserve and protect our cultural heritage. It will be a comprehensive, scholarly document that not only fulfills federally mandated legal requirements but also serves as a scientific reference for future professional studies. It will identify sites which may require additional investigations and which may have potential for public-use development. Thus, the report's content must be analytical in nature, not just descriptive.

2.00 PROJECT DESCRIPTION

2.01 The Eau Galle Reservoir is located in southeastern Wisconsin on the Eau Galle River, a tributary of the Chippewa River. The reservoir is just north of Spring Valley, Wisconsin, and straddles the Pierce County-St. Croix County line. The Eau Galle Reservoir is approximately 50 miles east of the Twin Cities and 40 miles west of Eau Claire, Wisconsin.

2.02 The Eau Galle Dam and Reservoir and downstream channel improvements were authorized by the Flood Control Act of 1958 (P.L. 85-500). The St. Paul District, Corps of Engineers, began construction in 1965 and completed it in 1969. At conservation pool elevation (940 feet m.s.l.), the reservoir covers approximately 150 surface acres. At elevation 940 feet, the reservoir shoreline totals about 5½ miles.

2.03 Archaeological surveys of the Eau Galle Reservoir area were conducted in 1962 and 1964 by the State Historical Society of Wisconsin in cooperation with the National Park Service. These surveys were limited to the flood pool area and the expected elevation of 1028.0 feet.

2.04 Fifteen archaeological sites were located during the 1962 survey conducted by A. Dewey Buck and Bent Thygesen. The results of this survey are available in a report entitled Archaeological Survey of the Eau Galle Reservoir, Spring Valley, Wisconsin.

2.05 The 1964 survey was conducted by Hank Kerr. This survey resulted in the location of an additional 10 sites. Five of the 1962 sites were also tested. The results of this survey and testing program are available in a report entitled Archaeology of the Eau Galle River Valley Dam Salvage Program.

2.06 In addition to the two surveys conducted in the Eau Galle Reservoir area, site 47 SC 24 was excavated by the State Historical Society of Wisconsin in 1966. The results of this excavation are available in a report entitled Excavations at the Lamb-5 Site (47 SC 25) Saint Croix County, Wisconsin (also published in The Wisconsin Archeologist, New Series, Volume 49, No. 1, March, 1968). This excavation was also in cooperation with the National Park Service.

3.00 DEFINITIONS

3.01 For the purpose of this study, the cultural resources investigation will include a literature and records review, and a Phase I on-the-ground reconnaissance level survey. Phase II testing will not be conducted at this time.

3.02 "Cultural resources" are defined to include any building, site, district, structure, object, data, or other material relating to the history, architecture, archaeology, or culture of an area.

3.03 "Literature search" is defined as an examination and review of written reports, books, articles, etc., published and unpublished, which are pertinent to the cultural resources investigation to be carried out for a particular project. The purpose of the literature search is to familiarize the Contractor with the cultural history of the study area and past investigations which have been carried out in the area, and to provide this information in a summarized form to the agency requesting the search. While the existing data could be extensive, the literature search should be as comprehensive as possible in providing a usable body of data for the purposes outlined above.

3.04 "Records review" is defined as the examination and review of records, files, etc., which are maintained by various local and State agencies. The purpose of the records review is to document the location of known sites which may exist within the project area, their condition, the extent of past work undertaken at the site, and any other information which may be relevant in assessing the significance of the site.

3.05 "Phase I cultural resources survey" is defined as an intensive, on-the-ground survey and testing of an area sufficient to determine the number and extent of the resources present and their relationship to project features. A Phase I cultural resources survey will result in data adequate to assess the general nature of the sites present; a recommendation for additional testing of those resources which, in the professional opinion of the Contractor may provide important cultural and scientific information; and detailed time and cost estimates for Phase II testing.

3.06 "Phase II testing" is defined as the intensive testing of those sites which may provide important cultural and scientific information. Phase II testing will result in data adequate to determine the eligibility of the resources for inclusion on the National Register of Historic Places, a plan for the satisfactory mitigation of eligible sites which will be directly or indirectly impacted, and detailed time and cost estimates for mitigation.

4.00 STUDY AREA

4.01 The literature search and records review conducted by the Contractor will be concerned with the prehistoric and historic resources of the Eau Galle Dam and Reservoir area. (Map to be provided.)

4.02 The Contractor will conduct on-the-ground surveys in the following areas:

a. All Corps-owned land will be surveyed with the exception of those areas that have been disturbed. The total land area to be surveyed is approximately 250 acres. (Map to be provided.)

b. Sixty acres of land located in Sec. 6 T27N R15W below the spillway. (Map to be provided.)

5.00 PERFORMANCE SPECIFICATIONS

5.01 The Contractor will utilize a systematic, interdisciplinary approach in conducting the study. The Contractor will provide specialized knowledge and skills during the course of the study to include expertise in archaeology and

other social and natural sciences as required. Personnel involved with the work under this contract must meet the minimum professional qualifications outlined in Appendix B.

5.02 The extent and character of the work to be accomplished will be subject to the general supervision, direction, control, and approval of the Contracting Officer.

5.03 Techniques and methodologies used during the investigation shall be representative of the current state of knowledge for their respective disciplines.

5.04 The Contractor shall keep standard field records which shall include, but not be limited to, field notebooks, site survey forms, field maps, and photographs.

5.05 The tested areas will be returned as closely as practical to presurvey conditions by the Contractor.

5.06 The recommended professional treatment of recovered materials is curation and storage of the artifacts at an institution that can properly insure their preservation and that will make them available for research and public view. The Contractor will be responsible for making curatorial arrangements for any collections which are obtained. Such arrangements must be coordinated with the appropriate officials of Wisconsin and approved by the Contracting Officer.

5.07 When sites are not wholly contained within the Corps-owned land, the Contractor shall survey an area outside the right-of-way limits large enough to include the entire site within the survey area. This procedure shall be done in an effort to delineate site boundaries and to determine the degree to which the site will be impacted.

5.08 The Contractor shall provide all materials and equipment as may be necessary to expeditiously perform those services required of the study.

Literature Search

5.09 The Contractor will obtain information and data for the literature search and records review from, but not be limited to, the following sources:

a. Published and unpublished reports and documents such as books, journals, theses, dissertations, manuscripts, newspapers, W.P.A. reports, surveyors' maps and notes, early atlases, and missionary records.

b. Site files and other information held at the State Historical Society of Wisconsin Libraries, Archives, and Archaeology Department; the State Archaeologist's Office; the University of Wisconsin Department of Anthropology and libraries; and materials available from the Pierce and St. Croix County Historical Societies and other local historical societies.

c. Information from the State Historic Preservation Office regarding any cultural resources in the project area that have been nominated or are being considered for nomination to the National Register of Historic Places.

d. Consultation with other professionals familiar with cultural resources in the area.

e. Consultations with amateur archaeologists and individuals concerned with local history in order to locate sites and to identify and define local interests and resources perceived to be locally significant.

5.10 A study and evaluation of previous archaeological and historical studies of the region, including the date, extent, and adequacy of the past work as it reflects on the interpretation of what has been done in the area should be undertaken and summarized in the report.

5.11 The literature search should include a listing of all sites (historic and prehistoric) identified during the course of the study and an evaluation of the current impacts upon them by the project.

Phase I Survey

5.12 The on-the-ground examination will involve an intensive survey and shovel testing of the area to determine the number and extent of cultural resources present. This includes standing structures as well as historical and prehistoric archaeological sites.

5.13 An attempt will be made to locate all resources previously recorded that are located in the project area as described in section 4.00 and to report their condition.

5.14 The survey shall include surface inspection in areas where surface visibility permits adequate recovery of cultural materials and subsurface testing where surface visibility is limited. Subsurface investigation may include test pits, corings, or cut bank profiles where appropriate.

5.15 Cut bank profiles will be undertaken in any areas that have been disturbed due to erosion and bank slumping.

5.16 Special attention will be given to any sites located along the shorelines that are eroding. Recommendations will be made regarding their present condition and future considerations for preservation and protection.

5.17 The recommended grid or transect interval is 15 meters (50 feet). However, this interval may vary depending upon field conditions. If the recommended interval is not used, justification should be presented for selection of an alternate interval. All tests will be screened through 1/4-inch mesh.

6.00 GENERAL REPORT REQUIREMENTS

6.01 Upon completion of field work, the Contractor will submit to the Contracting Officer a brief report detailing the work accomplished. Upon completion of all field investigations and research, the Contractor shall prepare a technical report detailing the work done, the results, and the recommendations for testing and associated time and cost estimates for those resources found to have potential for the National Register. The Contractor shall also submit a popular report, written in layman's terms, suitable for release to the public. Normally, the length of the popular report shall not exceed ten typewritten pages.

6.02 The technical report shall include, but not be limited to, the following sections. These sections do not necessarily need to be discrete sections; however, they should be readily discernable to the reader.

a. Title page: The title page should provide the following information: the type of survey undertaken (reconnaissance, intensive); the cultural resources assessed (archaeological, historical, architectural); the project name and location (county and State); the date of the report; the Contractor's name; the contract number; the name of the author(s) and/or Principal Investigator; the signature of the Principal Investigator; and the agency for which the report is being prepared.

b. Administrative Summary: The summary will be a synopsis of the report, defining the project area and the level of the cultural resources investigation. It shall summarize the research objectives and problems, methods, numbers, and types of resources identified, the significant recommendations, and any unusual or innovative findings or techniques developed during the course of the investigation. Because this information will serve both as an administrative summary and as a portion of that information required by the Department of the Interior for its annual report to Congress (pursuant to Section 5.c. of the Reservoir Salvage Act as amended), the summary should be as detailed and succinct as possible. Normally, the summary will not exceed one typewritten page.

c. Table of Contents.

d. Introduction: This section should include the purpose of the report; a description of the proposed project; the location of the proposed project, including a map of the general area; and a project map (a list of USGS quadrangle maps which cover the project area should also be included); and the dates during which the field survey was conducted. The introduction shall also contain the name of the institution where recovered materials will be curated.

e. Environmental Setting: This section should contain a brief description of the environment of the study area, both present and past conditions, and it should be of a length commensurate with other sections of supporting type information. The purpose of this section is to document changes in past environmental conditions and the manner in which man has adapted to or attempted to change these conditions. The discussion should follow a broader habitat approach rather than a listing of faunal and floral species. When possible, specific examples should be provided as supportive evidence of these changes, such as pollen studies and environmental data contained within prehistoric sites.

f. Literature Search: This section should detail the sources used for the literature search and records review as well as a description of all information encountered. Bibliographic information should also be included at the end of the report.

g. Field Methods: This section should give an explicit statement of testing and survey methods and rationale. It should describe the areas which were surveyed (types of ground cover, degree of surface visibility, etc.) whether or not the survey resulted in the location of any cultural resources, the methods used to survey the area (pedestrian reconnaissance, subsurface test, etc.), the rationale for eliminating uninvestigated areas, the estimated size of the investigated sample and its relationship to the sample universe (e.g., 100 acres representing 15 percent percent of the project impact area), and the grid of transect interval used. Testing methods should include descriptions of test units (size, intervals, depth) and the rationale behind their placement.

h. Laboratory Methods: This section should explain in detail the laboratory methods employed and the rationale behind the method selected. This section should also contain references to accession numbers used for all collections, photographs and field notes obtained during the study, and the location where they are permanently housed.

i. Summary of Regional Prehistory and History: This section should discuss the regional cultural developments in their spatial and chronological position.

j. Investigation Results: This section should describe the historical as well as the prehistoric and historic archaeological resources encountered in the literature search and survey, with each site discussed as a separate unit. The site description should include the size of the site, type of site (i.e., historic dwelling, prehistoric village, mound group, etc.); the cultural component(s) of the site (if discernable); and the general nature of the site as it existed at the time of the survey. An inventory of cultural material recovered from sites may be included in this section or added to the site survey forms. Accession numbers for collected cultural material should be included as a part of the inventory. Inventoried sites shall include a site number. Official site designations assigned by an appropriate State agency are preferred. However, if temporary site numbers will be used in either the draft or final reports, they shall be substantially different from the official site designations to avoid confusion or duplication of site numbers.

k. Recommendations: This section should discuss the direct and indirect impacts that the project will have on cultural resources. For those sites encountered, the Contractor shall make recommendations for the adequate assessments of those sites considered to have potential for eligibility to the National Register of Historic Places. This assessment will not proceed to the level described in paragraph 3.06. These recommendations should include a time and cost estimate for Phase II testing. If it is the Contractor's assessment that no significant resources exist in the project areas, the methods of investigation and reasoning which support that conclusion will be presented. If certain areas are not accessible, recommendations will be made for future consideration. If it is found that significant resources do exist in the area, the report will describe the information recovered and where the resources were located, and will assess the extent and potential of the recovered information. Any evidence of cultural resources or materials which have been previously disturbed or destroyed will be presented and explained. Specific recommendations for the preservation and protection of any potentially significant sites located during the survey shall be made. These recommendations shall be developed in a manner in which they may be incorporated into an effective management plan for all cultural resources at the Eau Galle Reservoir.

l. References: All references must follow American Antiquity format.

m. Appendix: This section should contain the Scope of Work and the resumes of the Principal Investigator and crew.. State site forms shall also be included as an appendix.

n. All sites identified in the course of the study, including find spots and known sites, will be presented on State site forms as an appendix to the report. Data should also be provided about the present condition of the sites (disturbance by natural or manmade processes) and content of any collections from the sites. Known sites shall have their State site forms updated as necessary. All State site forms will be submitted to the State Archaeologist.

o. The location of all sites and other features discussed in the text will be shown on 8½ X 11 inch legibly photocopied USGS map sections and will be bound into the report. Project maps shall also be included as part of contract correspondence showing the relationship of sites to the project areas as well as areas surveyed. In addition, the project map will show those areas that have been eliminated from survey due to lake levels or swampy conditions. Maps should also show the type of survey method employed for each area surveyed (example, pedestrian walkover, shovel tests) and formal test pits, if applicable. All maps will be labeled with a description, a north arrow, a scale bar, township and range (on USGS maps only), and the map source (e.g., the USGS quad name or published source).

p. Failure to fulfill these report requirements will result in the rejection of the report by the Contracting Officer.

7.00 FORMAT SPECIFICATIONS

7.01 Text materials will be typed (single-spaced or space-and-a-half) on good quality bond paper, 8.5 inches by 11.0 inches, with a 1.5-inch binding margin on the left, 1-inch margins on the top and right, and a 1.5-inch margin at the bottom. The report will be printed on both sides of the paper.

7.02 Information will be presented in textual, tabular, and graphic forms, whichever is most appropriate, effective, or advantageous to communicate the necessary information.

7.03 All figures must be readily reproducible by standard xerographic equipment.

7.04 Negatives of all black and white photographs contained in the final report must be included so that copies for distribution can be made.

8.00 SUBMITTALS

8.01 The Contractor will submit reports according to the following schedules:

a. Brief Field Report: The original and one copy will be submitted upon completion of field work.

b. Draft Final Report: The original and six copies will be submitted 355 calendar days after contract award. The Contracting Officer will provide the Contractor with comments on this draft report.

c. Revised Final Report: The original and 15 copies will be submitted 30 calendar days after contract award. This final report will include appropriate revisions in response to the Contracting Officer's comments.

8.02 The Contractor shall not release any sketch, photograph, report, or other material of any nature obtained or prepared under this Contract without specific written approval of the Contracting Officer prior to the acceptance of the final report by the Government.

9.00 METHOD OF PAYMENT

9.01 Requests for partial payment under this fixed price contract shall be made monthly on ENG Form 93. A 10-percent retained percentage will be withheld from each partial payment. Upon approval of the final reports by the Contracting Officer, final payment, including previously retained percentage, shall be made.

Appendix B

CORRESPONDENCE



DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
1135 U. S. POST OFFICE & CUSTOM HOUSE
ST. PAUL, MINNESOTA 55101

REPLY TO
ATTENTION OF:

Dear Property Owner:

The St. Paul District, Corps of Engineers, currently is considering conducting an archaeological and historical survey of all Corps-owned lands at Eau Galle Reservoir. These surveys are required by Federal law to insure that we do not disturb or destroy significant cultural resources.

Next summer, archaeologists from Archaeological Field Services, Inc., under contract with the St. Paul District, will be conducting archaeological and historical surveys at Eau Galle Reservoir. So that these archaeologists may have access to all Corps-owned lands, we urge that you extend your cooperation to the archaeologists by allowing them complete access across your property if they request it.

The archaeologists will not specifically survey your property for cultural resources unless the archaeological site extends beyond the Corps-owned property line. In such cases, the archaeologists will contact you again for permission to work on your land. In all cases, every effort will be made to respect your land and other possessions.

In addition, local individuals who are more familiar with the area often bring many archaeological and historical sites to the attention of archaeologists. Should you have any information about prehistoric or historic resources in the area of Eau Galle Reservoir, we would be very grateful if you would inform the archaeologists so that these sites can also be considered in any reservoir management plans.

We hope that you will join the Corps of Engineers in this important effort to preserve the cultural heritage of Wisconsin. If you have any questions about the archaeological survey, please contact Ms. Terry Pfutzenreuter, Archaeologist, at the St. Paul District office ((612)725-7854).

Thank you very much for your cooperation.

Sincerely,

A handwritten signature in cursive script, reading "Robert F. Post", is written above the typed name.

ROBERT F. POST
Chief, Environmental Resources Branch
Engineering Division

HISTORICAL RESEARCH, INC.

5406 PENN AVENUE SOUTH
MINNEAPOLIS, MINNESOTA 55419

(612) 929.4996

29 July 1981

Mrs. Ursula Peterson, President
Pierce County Historical Association
936 West Maple Street
River Falls, Wisconsin 54022

Re: Cultural Resources Investigation of the Eau Galle
Reservoir; U.S. Army Corps of Engineers Contract No.
DACW37-80-D-0045; Prime Contractor: Archaeological Field
Services, Inc.; Subcontractor: Historical Research, Inc.
HRI File No. 1011 H

Dear Mrs. Peterson:

We are undertaking the above-referenced investigation of
archaeological and historical sites in the Study Area
shown on the enclosed map.

The legal description of the Pierce County portion of the
Study Area is: T27N R15 Sections 4, 5, 6, 7, 8, and 9 and
T27N R16W Sections 1, 2, 3, 10, 11, and 12.

We are writing to enlist your assistance in helping us locate
any archaeological or historical sites in the Pierce County
Historical Association which would not be in the files of the
State Historical Society of Wisconsin or in the State Archaeo-
logist's Office in Madison.

The only historical site we have located to date is located in
the St. Croix portion of our Study Area. Perhaps your
organization has additional information not duplicated in the
Reference Library and Manuscripts Divisions of the State Society.
If so, we would appreciate hearing from you.

We would also be interested in any local informants which might
have knowledge of the area in question.

Thank you for your assistance.

Sincerely,

Page 2

HISTORICAL RESEARCH, INC.

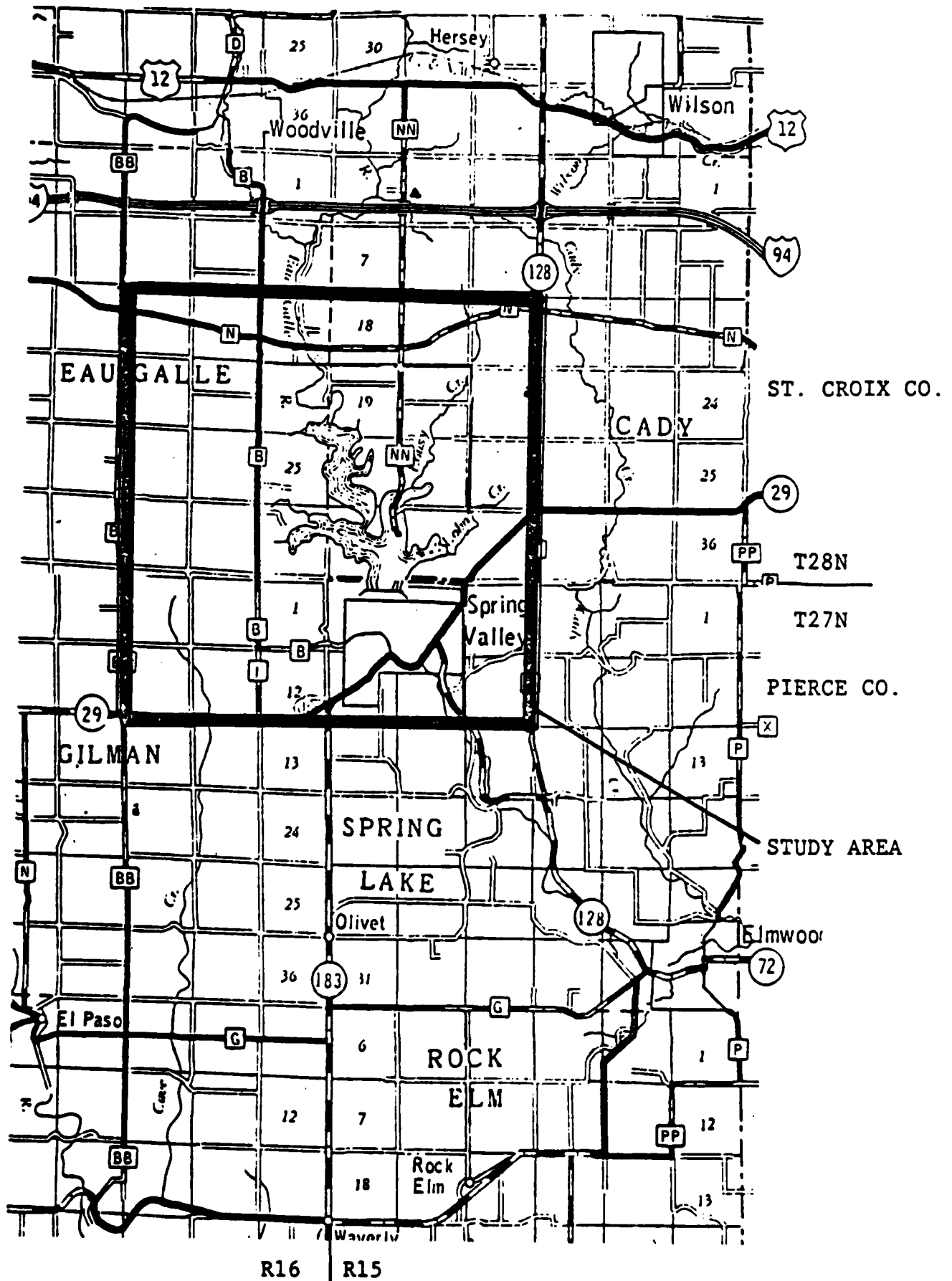
Norene A. Roberts

Dr. Norene A. Roberts, President

Enc:

cc: HRI File No. 1011 H

Figure 1



HISTORICAL RESEARCH, INC.

5406 PENN AVENUE SOUTH
MINNEAPOLIS, MINNESOTA 55419

(612) 929-4996

29 July 1981

Mrs. Sonia A Huber, President
St. Croix Historical Society
Route 5, Box 63
Hudson, Wisconsin 54016

Re: Cultural Resources Investigation of the Eau Galle
Reservoir; U.S. Army Corps of Wngineers Contract No.
DACW37-80-D-0045; Prims Contractor: Archaeological
Field Services, Inc.; Subcontractor: Historical Re-
search, Inc., HRI File No. 1011 H

Dear Mrs. Huber:

We are undertaking the above-referenced investigation of
archaeological and historical sites in the Study Area
shown on the enclosed map.

The legal description of the St. Croix County portion of
the Study Area is: T28N R15W Sections 16, 17, 18, 19, 20,
21, 28, 29, 30, 31, 32, and 33 and T28N R16W Sections 13,
14, 15, 22, 23, 24, 34, 35, and 36.

We are writing to enlist your help in locating any archaeolo-
gical or historical sites in the St. Croix Historical Society
files which would not be in the files of the State Historical
Society of Wisconsin or in the State Archaeologist's Office
in Madison.

So far, we have located a Norwegian log house in T28N R16W
Section 15 and some 30 archaeological sites around the Eau
Galle Reservoir. Prehaps your organization has additional
information not duplicated in the Reference Library and
Manuscripts divisions of the State Society. If so. we would
appreciate hearing from you.

We would also be interested in any local informants which
might have knowledge of the area in question.

Page 2

Thank you for your assistance.

Sincerely,

HISTORICAL RESEARCH, INC.

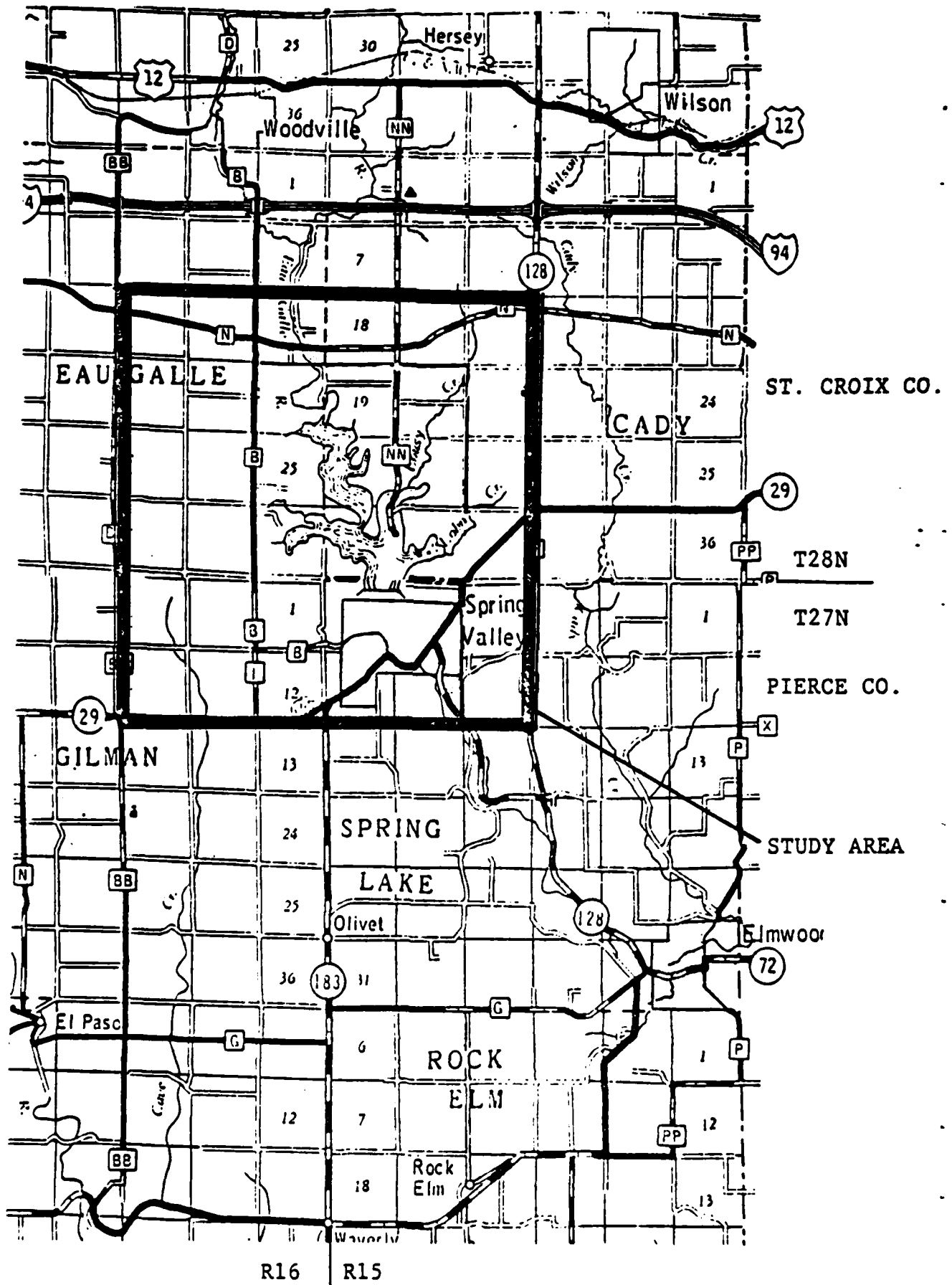
Norene A. Roberts

Dr. Norene A. Roberts, President

Encl:

cc: HRI File No. 1011 H

Figure 1





ARCHAEOLOGICAL FIELD SERVICES, INC.

421 SOUTH MAIN STREET, SUITE 421-F, STILLWATER, MINNESOTA 55082 - TELEPHONE: OFFICE AND LAB (612) 439-6782

30 January 1981

Mr. Lloyd Mathiesen
Acting Park Manager
Spring Valley, Wisconsin 54767
Telephone: (715) 778-5562

Re: Cultural Resources Investigation of Eau Galle Reservoir,
Pierce and St. Croix Counties, Wisconsin for the St. Paul
District Corps of Engineers
Contract No. DACW37-80-D-0045
Work Order No. 0005
AFS, Inc. File No. 2084-H

Dear Mr. Mathiesen:

Archaeological Field Services, Inc. has been contracted by the St. Paul District Army Corps to conduct a cultural investigation of the Eau Galle Reservoir, within the Corps owned property. A literature search/records check is being conducted, along with an archaeological reconnaissance level field investigation.

Your name has been provided to us by representatives from the Environmental Branch, as a contact for information regarding the reservoir's history (e.g. pre-flood condition, areas disturbed during construction, areas disturbed after construction and up to the present day, amount of erosion, current land use, etc.) and any other available pertinent data which might be useful to the cultural resource investigators.

We would appreciate any data which is available and which would prove useful in the completion of the project. In advance, I would like to thank you for your aid and assistance in this matter and if I may provide you with any additional information, please do not hesitate to contact me.

Very truly yours,

ARCHAEOLOGICAL FIELD SERVICES, INC.

A handwritten signature in dark ink, appearing to read 'J. Hudak', is written over the company name.

G Joseph Hudak, President

GJH:blm



ARCHAEOLOGICAL FIELD SERVICES, INC.

421 SOUTH MAIN STREET, SUITE 421-F, STILLWATER, MINNESOTA 55082 - TELEPHONE: OFFICE AND LAB (612) 439-6782

30 January 1981

Mr. Milt Roppe
Area Park Manager
La Crescent, Minnesota 54947
Telephone: (507) 895-6341

Re: Cultural Resources Investigation of Eau Galle Reservoir,
Pierce and St. Croix Counties, Wisconsin for the St. Paul
District Corps of Engineers
Contract No. DACW37-80-D-0045
Work Order No. 0005
AFS, Inc. File No. 2084-H

Dear Mr. Roppe:

Archaeological Field Services, Inc. has been contracted by the St. Paul District Army Corps to conduct a cultural investigation of the Eau Galle Reservoir, within the Corps owned property. A literature search/records check is being conducted, along with an archaeological reconnaissance level field investigation.

Your name has been provided to us by representatives from the Environmental Branch, as a contact for information regarding the reservoir's history (e.g. pre-flood condition, areas disturbed during construction, areas disturbed after construction and up to the present day, amount of erosion, current land use, etc.) and any other available pertinent data which might be useful to the cultural resource investigators.

We would appreciate any data which is available and which would prove useful in the completion of the project. In advance, I would like to thank you for your aid and assistance in this matter and if I may provide you with any additional information, please do not hesitate to contact me.

Very truly yours,

ARCHAEOLOGICAL FIELD SERVICES, INC.

A handwritten signature in dark ink, appearing to read 'G. Joseph Hudak', is written over the typed name.

G. Joseph Hudak, President

GJH:blm

Appendix C

PERSONNEL VITAE

VITA

G. Joseph Hudak, President
Archaeological Field Services, Inc.
421 South Main Street, Suite 421-F
Stillwater, Minnesota 55082
Telephone: (612) 439-6782

Education:

- 1971 B.A. Degree
University of Minnesota
Minneapolis, Minnesota 55455
- 1974 M.A. Degree
University of Nebraska
Lincoln, Nebraska

Teaching Assistantships:

- 1970- University of Minnesota, under Dr. Elden Johnson
1971 (undergraduate)
- 1972- University of Nebraska, under Dr. Warren Caldwell
1973 (graduate)

Teaching Positions:

- 1973 The Pedersen Site (21-LN-2), taught University of Minnesota
Archaeological Field School.
- 1974 The Pedersen Site (21-LN-2), taught Macalester College and
Hamline University combined Field School.
- 1973- Taught internship students from Macalester College and Ham-
1975 line University, while employed at The Science Museum of
Minnesota.
- 1977 Taught Southwest State Field School at a salvage site near
Granite Falls, Minnesota (project done under the auspices
of the Minnesota Department of Transportation, The Science
Museum of Minnesota, and Southwest State University at Mar-
shall, Minnesota).

Professional Organizations:

Society for American Archaeology
Society of Professional Archaeologists
Plains Anthropological Association
American Anthropological Association
Council for Minnesota Archaeology
Minnesota Archaeological Society

Archaeological Field Experience:

- 1969 Prairie Island Village Site; University of Minnesota;
 Field Crew Member.
- 1969 Gull Lake Mound and Village Site; University of Minnesota;
 Field Assistant.
- 1970 Smith and McKinstry Mounds; University of Minnesota;
 Field Teaching Assistant.
- 1970 Northeastern Minnesota Wild Rice Archaeological Survey and
 Transect; University of Minnesota;
 Survey Specialist.
- 1971 Southwestern Minnesota Archaeological Survey; University of
 Minnesota;
 Survey Specialist.
- 1971 Thompson and Nelson Village Sites; University of Minnesota
 and University of Nebraska;
 Field Assistant.
- 1972 Mille Lacs Lake & Kathio and Anderson Village Sites; State
 Parks Archaeologist for the Department of Natural Resources.
- 1972 Big Stone State Park Archaeological Survey; University of
 Minnesota;
 Survey Specialist.
- 1972 Blue Mounds Archaeological Site; University of Minnesota;
 Survey Specialist.
- 1973 The Pedersen Site; The Science Museum of Minnesota;
 Field Director.
- 1974 The Pedersen Site; The Science Museum of Minnesota;
 Field Director.
- 1974 Wild River Archaeological Survey; The Science Museum of
 Minnesota;
 Survey Director.

- 1974 South Zumbro Watershed District Archaeological Survey; The Science Museum of Minnesota; Survey Director.
- 1974 Lake Hanska Archaeological Survey; The Science Museum of Minnesota; Survey Director.
- 1975 Southern Minnesota Archaeological Survey and Transect; The Science Museum of Minnesota (William F. McKnight Foundation); Field Director.
- 1975 Archaeological Survey of the Proposed Winona Levee Flood Control Project Stage II; St. Paul District Corps of Engineers; The Science Museum of Minnesota; Project Director.
- 1975 Archaeological Survey of the 1975 Season Dredge Spoil Deposit Sites in Mississippi River Pools USAF-5; St. Paul District Corps of Engineers; The Science Museum of Minnesota; Field Director.
- 1975 Pike Island Survey; St. Paul District Corps of Engineers; The Science Museum of Minnesota; Project Director.
- 1976 The Mountain Lake Site; The Science Museum of Minnesota; Project Director.
- 1976 Wright County Salvage Excavation; The Science Museum of Minnesota; Project Director.
- 1977 Archaeological Survey of the Isanti County Rum River Bridge Project No. 30508; The Science Museum of Minnesota; Project Director.
- 1977 Archaeological Survey of the Talcott Lake County Park; The Science Museum of Minnesota; Project Director.
- 1977 Archaeological Survey and Salvage of Sites Near Granite Falls, Minnesota; Minnesota Department of Transportation; The Science Museum of Minnesota; Project Director.
- 1977 Archaeological Survey of Lands Adjacent to the Big Sandy Lake Reservoir; St. Paul District Corps of Engineers; The Science Museum of Minnesota; Project Director.

- 1978 Archaeological Survey of the Snake River Footbridge Crossing Site; Minnesota Department of Natural Resources; Archaeological Field Services, Inc.
Field Director.
- 1978 Archaeological Survey of Lands Adjacent to the Pine River Reservoir; University of Minnesota and St. Paul District Corps of Engineers; Archaeological Field Services, Inc.;
Project Director.
- 1978 Archaeological Survey of the City of Brainerd; Water and Light Department, Mississippi River Powerline Crossing; Crow Wing County; Archaeological Field Services, Inc.;
Principal Investigator.
- 1978 Archaeological Reconnaissance Survey of Subdivision No. 3672, Creekwood Estates, Coon Rapids, Anoka County, Minnesota; Archaeological Field Services, Inc.;
Principal Investigator.
- 1978 Archaeological Survey of Sunny Acres Estates, Anoka County; Archaeological Field Services, Inc.;
Principal Investigator.
- 1978 Archaeological Reconnaissance Survey Within Garvin Park, Lyon County, Minnesota; Archaeological Field Services, Inc.;
Principal Investigator.
- 1978 Archaeological Survey of the 90 Acre Dam Construction Site in the Sartell Wildlife Management Area on Little Rock Creek, Benton County, Minnesota; Archaeological Field Services, Inc.;
Principal Investigator.
- 1978 Archaeological Reconnaissance Survey of the Loon Lake Wildlife Refuge, Jackson County and the Fergus Falls Refuge, Ottertail County, Minnesota; U.S. Department of the Interior; Archaeological Field Services, Inc.;
Principal Investigator.
- 1978 Archaeological Reconnaissance Survey of Approximately 10 Acres for the Proposed Wastewater Treatment Facilities at Fountain, Fillmore County, Minnesota; Archaeological Field Services, Inc.;
Principal Investigator.
- 1978 Archaeological Reconnaissance Survey of the Sherburne National Wildlife Refuge Water Control Structures Planned for 1978-1979; Dikes, Ditches, and Borrow Pits, Sherburne County; U.S. Department of the Interior, U.S. Fish and Wildlife Service, Archaeological Field Services, Inc.;
Principal Investigator.

- 1978 Archaeological Survey of a Portion of the Maka-Oicu County Park, Nobles County, Minnesota; Archaeological Field Services, Inc.;
Principal Investigator.
- 1978 Archaeological Reconnaissance Survey of the Proposed U.S. Fish and Wildlife Service Earthen Dike and Water Control Structure in Blakesley Slough Waterfowl Production Area on the Pomme de Terre River, Grant County, Minnesota; Archaeological Field Services, Inc.;
Principal Investigator.
- 1978 Records Search of the Proposed Trunk Highways 610 and 169 Corridors, Anoka and Hennepin Counties, Minnesota; Bather, Ringrose, Wolsfeld, Jarvis and Gardner, Inc.; Archaeological Field Services, Inc.;
Principal Investigator.
- 1978 Archaeological Reconnaissance Survey of the Department of Natural Resources' Trails at Washburn Lake, Spider Lake, and Fond du Lac, Cass and Carlton Counties, Minnesota; Archaeological Field Services, Inc.;
Principal Investigator.
- 1979 A Cultural Resources Survey of the Proposed Undertakings Within the Chippewa National Forest in Beltrami, Cass, and Itasca Counties, Minnesota; U.S. Department of Agriculture, Forest Service; Archaeological Field Services, Inc.;
Principal Investigator.
- 1979 Archaeological Reconnaissance Survey of Upland Disposal Area, Golf Course Improvement Areas, and Additional Real Estate Development Areas, Mille Lacs County, Minnesota; U.S. Army Corps of Engineers; Archaeological Field Services, Inc.;
Principal Investigator.
- 1979 Cultural Resource Awareness Training Session on the Superior National Forest in Duluth, Minnesota; U.S. Department of Agriculture, Forest Service; Archaeological Field Services, Inc.;
Principal Investigator.
- 1979 A Cultural Resources Records Check of the Rum River: Anoka, Isanti, Mille Lacs, and Sherburne Counties, Minnesota; Minnesota Department of Natural Resources, Division of Parks and Recreation; Archaeological Field Services, Inc.;
Principal Investigator.
- 1979 Archaeological Reconnaissance Survey of a Portion of the Benson Wetlands (Edwards Site), Stevens County, Minnesota; U.S. Department of the Interior, U.S. Fish and Wildlife Service; Archaeological Field Services, Inc.;
Principal Investigator.

- 1979 Archaeological Reconnaissance Survey of a Proposed Wastewater Treatment Facility at Echo, Yellow Medicine County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 Archaeological Reconnaissance Survey of a Proposed Wastewater Treatment Facility at Lester Prairie, McLeod County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Reconnaissance Survey of Perch Lake Park, Martin County, Minnesota; The County of Martin, Minnesota; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 Archaeological Reconnaissance Survey of a Proposed Wastewater Collection and Treatment System at Granada, Martin County, Minnesota; KBM, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Reconnaissance Survey of a Proposed Mechanical Wastewater Treatment Facility Site at Belle Plaine, Scott County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 A Reconnaissance Survey of the Archaeologically Sensitive Zones Within the Proposed Mora Airport Expansion Project, Mora, Kanabec County, Minnesota; The City of Mora, Minnesota; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Field Reconnaissance Survey of the Proposed Wet Bark Trail in the Memorial Hardwood Forest, Houston County, Minnesota; Minnesota Department of Natural Resources, Division of Parks and Recreation; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Reconnaissance Survey of Proposed Development of the Fritz Loven Park in Lake Shore, Cass County, Minnesota; The City of Lake Shore, Minnesota; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Reconnaissance Survey of a Proposed Wastewater Treatment Facility at Gaylord, Sibley County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.

- 1979 An Archaeological Reconnaissance Survey of the Proposed Trunk Highways 610 and 252 Corridors: Anoka and Hennepin Counties, Minnesota; Bather, Ringrose, Wolsfeld, Jarvis, Gardner, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Field Reconnaissance Survey of the Proposed Ash River Trail System, St. Louis County, Minnesota; Minnesota Department of Natural Resources, Division of Parks and Recreation; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Reconnaissance Survey of Laddie Lake Park in Blaine, Anoka County, Minnesota; The City of Blaine, Minnesota; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 A Cultural Resources Records Check and Archaeological Investigation of the Minnesota River Valley Refuge Lands; U.S. Department of the Interior, U.S. Fish and Wildlife Service; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 A Sample Archaeological Reconnaissance Survey of BLM Island and Upland Holdings in the State of Minnesota; U.S. Department of the Interior, Bureau of Land Management; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Reconnaissance Survey of the Proposed Transmission Line #131 From Arrowhead to Gary, Duluth, St. Louis County, Minnesota; Minnesota Power and Light Company; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Reconnaissance Survey of the Proposed Ortonville Wastewater Treatment Facility, Big Stone County, Minnesota; Ellerbe Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Reconnaissance Survey of a Proposed Stabilization Pond (et. al.) for a Wastewater Treatment System at Battle Lake, Otter Tail County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Reconnaissance Survey of a Proposed Wastewater Treatment Site at Madison, Lac Qui Parle County, Minnesota; Bonestroo, Rosene, Anderlik & Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.

- 1979 A Cultural Resources Records Check and Archaeological Investigation of the Minnesota River Valley Refuge Lands; U.S. Department of the Interior, U.S. Fish and Wildlife Service; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 Cultural Resources Studies of the Northern Border Pipeline Project; Literature/Records Search and Proposed Field Methodology Plan; Northern Plains Natural Gas Company; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Reconnaissance Survey of the Sherburne National Wildlife Refuge Pool #3 Facilities and Five (5) Building Construction Areas; U.S. Department of the Interior, U.S. Fish and Wildlife Service; Archaeological Field Services, Inc.; Principal Investigator.
- 1979 An Archaeological Reconnaissance Survey of the Proposed Wastewater Treatment Ponds at Blackduck, Beltrami County, Minnesota; KBM, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Proposed Wastewater Treatment Pond at Belgrade, Stearns County, Minnesota; KBM, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 Cultural Resources Investigation of the Upper Minnesota River Subbasin, Southwestern Minnesota and Northeastern South Dakota; Department of the Army, St. Paul District Corps of Engineers; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Proposed Northern Border Pipeline for the Northern Plains Natural Gas Company - Minnesota/Iowa Sections - Phase I - Selected River/Stream Crossings, Preliminary Site Selection; Northern Plains Natural Gas Company; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of Bass Lake Ridge, Hennepin County, Minnesota; Bather, Ringrose, Wolsfeld, Jarvis, Gardner, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Harrison Hills Project, Plymouth, Hennepin County, Minnesota; Hewitt Peterson & Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.

- 1980 An Archaeological Reconnaissance Survey of the Proposed Mechanical Wastewater Treatment Facility Site at Spring Valley, Fillmore County, Minnesota; McGhie & Betts, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Proposed Development Area in Garvin Park, Lyon County, Minnesota; Lyon County Park Commissioners; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Proposed Wastewater Treatment Facility Site at Albany, Stearns County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of Approximately 434 Acres of the UNIMIN Corporation's Proposed Silica Sand Mining and Processing Facility Located Near Kasota, LeSueur County, Minnesota; Bolton & Menk, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of a Proposed Wastewater Treatment Plant Located at Chatfield, Fillmore County, Minnesota; McGhie & Betts, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of a Proposed Wastewater Treatment Plant at Cyrus, Pope County, Minnesota; Bonestroo, Rosene, Anderlik & Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Foxborough Subdivision, Dakota County, Minnesota; Northland Mortgage Company; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 Archaeological Reconnaissance Survey of HTI Pipeline Nos. 101 & 102 Relocation at the West Fork of the Nodaway River (Crossing) in Adair County, Minnesota; Hydrocarbon Transportation, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of a Proposed Wastewater Treatment and Disposal System for the City of Donnelly, Stevens County, Minnesota; Toltz, King, Duvall, Anderson and Associates, Incorporated; Archaeological Field Services, Inc.; Principal Investigator.

- 1980 An Archaeological Reconnaissance Survey of the Proposed Wastewater Treatment Plant at Appleton, Swift County, Minnesota; Kirkham, Michael & Associates; Archaeological Field Services, Inc.;
Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of a Proposed Absorption Bed Site at the City of Avoca, Murray County, Minnesota; Toltz, King, Duvall, Anderson and Associates, Inc.; Archaeological Field Services, Inc.;
Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of a Proposed Wastewater Treatment Facility at Gaylord, Sibley County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.;
Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Proposed Stabilization Pond Site at Belgrade, Minnesota; KBM, Inc.; Archaeological Field Services, Inc.;
Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Ripple River Townhomes Site in Aitkin, Aitkin County, Minnesota; Orville E. Madsen & Sons, Inc.; Archaeological Field Services, Inc.;
Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of 3.9 Acres South of the Fish and Wildlife Service Waterfowl Area Six Miles East of Donnelly, Stevens County, Minnesota; U.S. Department of the Interior, Fish and Wildlife Service; Archaeological Field Services, Inc.;
Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Rice Lake National Wildlife Refuge in Aitkin County, Minnesota; U.S. Department of the Interior, Fish and Wildlife Service; Archaeological Field Services, Inc.;
Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Detroit Lakes Wetland Management District, Dahl Waterfowl Production Area, Clay County, Minnesota; U.S. Department of the Interior, Fish and Wildlife Service; Archaeological Field Services, Inc.;
Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Proposed 8 Acre Wastewater Treatment Plant and One-Half Mile Forcemain at Iona, Murray County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.;
Principal Investigator.

- 1980 An Archaeological Reconnaissance Survey of French Lake Terrace, Champlin, Minnesota; Hakanson Anderson Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 A Cultural Resources Survey of 579 Acres in Sherburne National Wildlife Refuge, Sherburne County, Minnesota; U.S. Department of the Interior, Fish and Wildlife Service; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Proposed Savanna Development, Located on Flowage Lake, Aitkin County, Minnesota; Heartland Development Consultants, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of a Proposed Wastewater Treatment Facility at the City of Springfield, Brown County, Minnesota; Bonestroo, Rosene, Anderlik & Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Proposed Wastewater Stabilization Pond Site at Steward, McLeod County, Minnesota; Comstock & Davis, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of Two Proposed Wastewater Stabilization Pond Sites Outside of the City of Storden, Cottonwood County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of Three Acres on the Robinson Waterfowl Production Area, Near Howard Lake, Wright County, Minnesota; U.S. Department of the Interior, Fish and Wildlife Service; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Proposed Wastewater Treatment Facilities for the City of Osakis, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 Cultural Resources Investigation of the Grand Forks/East Grand Forks Urban Study and East Grand Forks Flood Control Project; Department of the Army, St. Paul District Corps of Engineers; Archaeological Field Services, Inc.; Principal Investigator.

- 1980 Archaeological Survey of Proposed Railroad Relocation Sites In Doulgas County, Wisconsin, S.P. 6982-03 (I-35), Minn. Proj. I 035-6 (171), From Mesaba Avenue to 10th Avenue East, In Duluth, St. Louis County; State of Minnesota, Department of Transportation, in cooperation with Federal Highway Administration, U.S. Department of Transportation; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 An Archaeological Reconnaissance Survey of the Proposed Grain Alcohol Production Facility at Edgerton, Pipestone County, Minnesota; Agri-Fuels, Inc.; Wells Engineers, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1980 Cultural Resource Inventory of BLM-Administered Uplands and Islands in the State of Wisconsin, Contract No. YA-553-CTO-1021; U.S. Department of the Interior, Bureau of Land Management; Archaeological Field Services, Inc.; Principal Investigator.
- 1981 An Archaeological Reconnaissance Survey of the Proposed Wastewater Treatment Facility Near Marble-Calumet, Itasca County, Minnesota; Robert R. Wallace & Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1981 An Archaeological Reconnaissance Survey of the Eagle Lake East Project, City of Maple Grove, Minnesota; Hakanson Anderson Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1981 An Archaeological Reconnaissance Survey of the Green Lake Sanitary Sewer & Water District, Kandiyohi County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1981 An Archaeological Reconnaissance Survey of Fairway Woods in Eden Prairie, Hennepin County, Minnesota; Bather, Ringrose, Wolsfeld, Jarvis, Gardner, Inc.; Archaeological Field Services, Inc.; Principal Investigator.
- 1981 Cultural Resource Inventory of Lands In & Adjacent to the City of Rochester, Minnesota - Flood Control Project on the South Fork Zumbro River; U.S. Army Corps of Engineers; Archaeological Field Services, Inc.; Principal Investigator.

- 1981 Literature Search and Records Review of the Park River Subbasin, North Dakota; Grafton - Park River Flood Control Project; U.S. Army Corps of Engineers; Archaeological Field Services, Inc.;
Principal Investigator.
- 1981 Cultural Resources Investigation of Corps-Owned Lands In & Adjacent to Homme Dam & Reservoir, Walsh County, North Dakota; U.S. Army Corps of Engineers; Archaeological Field Services, Inc.;
Principal Investigator.
- 1981 Cultural Resources Investigation of the Shoreline of Orwell Reservoir in Otter Tail County, Minnesota; U.S. Army Corps of Engineers; Archaeological Field Services, Inc.;
Principal Investigator.
- 1981 Southwest Minnesota Plateau in Coteau des Prairies Effigy (and other alignments) Field Survey; Minnesota Historical Society; Archaeological Field Services, Inc.;
Principal Investigator.
- 1981 Archaeological Deep Test of Selected River Crossings in South Dakota Section of Northern Border Pipeline Right-of-Way; Archaeological Field Services, Inc.;
Principal Investigator.
- 1981 Archaeological Survey of Three Recorded Prehistoric Sites in Northern Border Pipeline Right-of-Way, Hamilin, Coddington and Clark Counties, South Dakota; Northern Border Pipeline Company; Archaeological Field Services, Inc.;
Principal Investigator.

Publications:

- 1972 "Boulder Outlines in Southwestern Minnesota", Plains Anthro-
pologist, Volume 17, 58, pt. 1.
- 1975 "The First Pottery Makers of Southwestern Minnesota", The
Explorer Magazine, Volume 17, Number 2.
- 1975 "An Early Woodland Pottery Vessel From Minnesota", joint
publication with Elden Johnson, Scientific Publications of
The Science Museum of Minnesota, New Series, Volume 3, Num-
ber 2.
- 1976 "Woodland Ceramics from the Pedersen Site", Scientific Pub-
lications of the Science Museum of Minnesota, New Series,
Volume 3, Number 2.

Occupational References:

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Clement P. Kachelmyer, Preliminary Design Engineer
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EDUCATION:

Ph.D., American Studies, University of Minnesota	1978
Minor: historical geography, Minnesota history	
M.A., American Studies, University of Minnesota	1972
Minor: art history, architectural history	
B.A., <u>cum laude</u> , English, University of Massachusetts, Amherst	1968
Graduate work in English literature, Oxford University, G.B.	1968

Dissertation: "An Early Political and Administrative History of the University of Minnesota, 1851-1884"

TEACHING, RESEARCH, AND ADMINISTRATIVE POSITIONS:

1968-75	Instructor and teaching assistant, English, American Studies, Continuing Education, University of Minnesota
1976	Instructor, Minnesota History, Honors Program, College of Liberal Arts, University of Minnesota
1975-77	Administrative and Research Fellow, Vice-President for Academic Affairs, University of Minnesota
1977-78	Undergraduate Advisor, American Studies, University of Minnesota

OTHER EMPLOYMENT:

1978-79	Historian, surveyor, architectural historian, State Historic Preservation Office, Minnesota Historical Society
1979	Freelance editor, Control Data Corporation Education Division

PROFESSIONAL ORGANIZATIONS:

American Association of State and Local History
American Institute of Historic Preservationists
American Studies Association
Council of Minnesota Archaeologists (Associate Member)
Hennepin County Historical Society
Minnesota Historical Society
National Trust for Historic Preservation
Society for the History of Technology
Phi Kappa Phi
Women Historians of the Midwest
Society of Architectural Historians
North Dakota Archaeological Society

Norene Davis Roberts (Continued)

RECENT HISTORICAL REPORTS AND PROJECTS:

- 1978 Historical surveys of Cass and Crow Wing counties, Minnesota; for the National Register of Historic Places; Minnesota Historical Society, State Historic Preservation Office
- 1979 First draft, Historic Preservation for Minnesota Communities; Minnesota Historical Society and Minnesota State Planning Agency (1980)
- 1979 Researcher, writer, for Seward Neighborhood History Committee; and two articles in Seward Profile, September, 1979, on the history and development of Seward Neighborhood, Minneapolis
- 1979 National Register Evaluation, Historic Survey of the Cedar-Riverside Commercial Area, for Cedar-Riverside Project Area Committee, Minneapolis, Minnesota; HUD funded; Historical Research, Inc. and Lynne Spaeth
Principal Investigator
- 1979 Forthcoming: "King's Fairs and other Minneapolis Expositions," Hennepin County History, Hennepin County Historical Society, Minneapolis, Minnesota
- 1979 A Cultural Resource Records Check and Archaeological Investigation of the Minnesota River Valley Refuge Lands; U.S. Department of the Interior, U.S. Fish and Wildlife Service; Contract no. 14-14-003-79-0199; Archaeological Field Services, Inc.;
Norene Roberts, Historian
- 1980 Feasibility study for a book-length history of the Blandin Foundation, Blandin Paper Company, and C.K. Blandin; Historical Research, Inc. and Lynne Spaeth for the Minnesota Historical Society
Norene Roberts, Historian and co-researcher
- 1980 A Cultural Resources Literature Search and Records Review of the Upper Minnesota River Basin-- Southwestern Minnesota and Northeastern South Dakota; U.S. Army Corps of Engineers, St. Paul District; Contract no. DAWC-79-C-0199; Archaeological Field Services, Inc.
Norene Roberts, Historian
- 1980 Author, forthcoming issue of Roots on Minnesota women; Education Division, Minnesota Historical Society
- 1980 Master Plan for an Interpretive Exhibit, Hubert H. Humphrey Institute of Public Affairs, University of Minnesota; Jeffrey A. Hess;
Norene Roberts, Research historian

Norene Davis Roberts (Continued)

- 1980 A Research, Planning, Evaluation and Design Study Regarding the Renovation and Adaptive Reuse of the Northern States Power Company, Main Street Hydro-Electric Station, St. Anthony Falls; A joint venture with Jeffrey A. Hess, Historical Consultant. Norene Davis Roberts, historian, History/Industrial Archeology Component
- 1980 "Historical Perspectives on People Connected with National Register Sites in Dakota County"; Dakota County Museum; a National Endowment for the Humanities Youth Project. Norene Davis Roberts, Consulting Humanist Scholar
- 1981 Class I and II Cultural Resource Inventory of BLM-Administered Islands and Uplands in the State of Wisconsin; Department of the Interior, Bureau of Land Management, Lake States Office; A joint venture with Archaeological Field Services, Inc. Norene Davis Roberts, co-Principal Investigator, author
- 1981 Cultural Resource Investigation of the Grand Forks/East Grand Forks Urban Study and the East Grand Forks Flood Control Project; U.S. Army Corps of Engineers, St. Paul District; Under subcontract to Archaeological Field Services, Inc., G. Joseph Hudak, Principal Investigator. Norene Davis Roberts, historian, author
- 1981 Cultural Resources Literature Search and Records Review of Grafton, North Dakota Flood Control Project; U.S. Army Corps of Engineers, St. Paul District; Under subcontract to Archaeological Field Services, Inc. G. Joseph Hudak, Principal Investigator. Norene Roberts, historian
- 1981 Walking Tour of Lake Harriet, for the Minneapolis Public Library and Information Center; Minneapolis: Portrait of a Lifestyle, National Endowment for the Humanities. Norene Roberts, author
- 1981 A Cultural Resources Inventory of Lands in and adjacent to the city of Rochester, Minnesota. U.S. Army Corps of Engineers, St. Paul District; under subcontract to Archaeological Field Services, Inc. G. Joseph Hudak, Principal Investigator. Norene Roberts, historian/architectural historian, author

Joe D. Roberts, Vice President
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EDUCATION:

Ph.D., American Studies, University of Minnesota	1976
M.A., English, University of Oklahoma	1964
B.A., English, Central State University (Oklahoma)	1962

Dissertation: "An Economic and Geographic History of Cushing, Oklahoma from its Origins Through the Oil Boom Years 1912-1917"

TEACHING AND ADMINISTRATIVE POSITIONS:

Communications Instructor, Dakota County Vo-Tech, 1976-80

Coordinator, Prison Project, University Without Walls, University of Minnesota, 1973-75

Instructor, University of Minnesota Department of English, 1970-1973;
1965-68

Instructor, Department of English, Central College, Pella, IA, 1964-65

Instructor, Department of English, University of Oklahoma, 1962-64

PUBLICATIONS:

Script, "The Omnia Story" promotional film, 1978

The materials listed below were published as video cassettes with interactive programmed text. Each title represents a set of fourteen cassettes with texts, for which I provided script and text.

Basic Machine Technology, Cambridge Book Company, 1978

Basic Engine Lathe, Cambridge Book Company, 1978

Oxyacetylene Welding, Cambridge Book Company, 1978

Electric Arc Welding, Cambridge Book Company, 1979

Advanced Welding, Cambridge Book Company, 1979

Intermediate Engine Lathe, Cambridge Book Company, 1979

Sportsmedicine, McGraw-Hill Publications, 1979

Advanced Machine Technology, Cambridge Book Company, 1980

Blueprint Reading, Omnia Corporation, 1980

The Band Saw, DoAll Corporation, 1980

"Machinist/Tool and Die Program" (slide show). Dakota County Vo-Tech, 1980

"Maintain Electric Motors" (slide show with programmed text). 916 Vo-Tech, White Bear Lake, MN, 1980

Joe D. Roberts (continued)

PROFESSIONAL ORGANIZATIONS:

Minnesota Historical Society
National Trust for Historic Preservation
American Studies Association
Hennepin County Historical Society
American Association of State and Local History
American Institute of Historic Preservationists
Society for the History of Technology
Society of Industrial Archeologists
Council of Minnesota Archaeologists (Associate Member)
North Dakota Archaeological Society

RECENT REPORTS AND PROJECTS:

- 1976 Writer, social impact section of Minnesota's bid for the Solar Energy Research Institute
- 1977 Designer, leader of seminar series on the history of the Twin Cities for senior citizens, sponsored by the National Council on Aging and the National American Studies Faculty
- 1980 A Cultural Resources Literature Search and Records Review of the Upper Minnesota River Basin--Southwestern Minnesota and Northeastern South Dakota; U.S. Army Corps of Engineers St. Paul District Contract No. DAWC-79-C-0199; Archaeological Field Services, Inc. Joe Roberts, editor
- 1980 Master Plan for an Interpretive Exhibit, Hubert H. Humphrey Institute of Public Affairs, University of Minnesota; Jeffrey A. Hess, Historical Consultant. Joe Roberts, Audiovisual consultant
- 1980 Rewrite editor, These United States (Two Volumes) by Irwin Unger; for Little, Brown and Company, Boston
- 1980 A Research, Planning, Evaluation and Design Study Regarding the Renovation and Adaptive Reuse of the Northern States Power Company, Main Street Hydro-Electric Station, St. Anthony Falls; Riverfront Development Coordination Board, Minneapolis; A joint venture with Jeffrey A. Hess, Historical Consultant. Joe Roberts, Principal Investigator, History/Industrial Archeology Component
- 1980 Forthcoming: "Ten-Barrel Whodunit: The Red Fork Oil Boom of 1901," Oklahoma Chronicles

Joe D. Roberts (continued)

- 1981 Class I and II Cultural Resource Inventory of BLM-Administered Islands and Uplands in the State of Wisconsin; Department of the Interior, Bureau of Land Management, Lake States Office; A joint venture with Archaeological Field Services, Inc. Joe Roberts, historian
- 1981 Cultural Resource Investigation of the Grand Forks/East Grand Forks Urban Study and the East Grand Forks Flood Control Project; U.S. Army Corps of Engineers, St. Paul District; Under subcontract to Archaeological Field Services, Inc., G. Joseph Hudak, Principal Investigator. Joe Roberts, historian
- 1981 Cultural Resources Literature Search and Records Review of Grafton, North Dakota Flood Control Project; U.S. Army Corps of Engineers, St. Paul District; Under subcontract to Archaeological Field Services, Inc., G. Joseph Hudak, Principal Investigator. Joe Roberts, historian, author
- 1981 Walking Tour of Lake Harriet, for the Minneapolis Public Library and Information Center; Minneapolis: Portrait of a Lifestyle, National Endowment for the Humanities. Joe Roberts, editor
- 1981 A Cultural Resources Inventory of Lands in and adjacent to the city of Rochester, Minnesota. U.S. Army Corps of Engineers, St. Paul District; under subcontract to Archaeological Field Services, Inc. G. Joseph Hudak, Principal Investigator. Joe Roberts, historian

VITA

H. Clyde Pedersen
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Education

- 1949- University of Minnesota, Duluth. Science, Literature and
1951 Arts Major.
- 1951- University of Minnesota, Minneapolis. Business Adminis-
1953 tration Major.
- 1956 Blair Business College, Colorado Springs, Colorado. Gen-
eral Business Major.

Military Service

- 1953- U.S. Army; Rank: Corporal; Skill: Radio Telegraph Operator;
1955 Medals: National Defense, European Theatre; Discharge:
Honorable.

Employment Background

- 1957- Pedersen Insurance Agency. Owner.
1978
- 1957- Pedersen Real Estate Company. Owner.
1978
- 1957- Buffalo Ridge State Bank of Ruthton, Inc. Ruthton, Minne-
1978 sota 56170.
1957-58 Assistant Cashier
1958-59 Vice President
1959-78 President and Chairman of the Board
- 1978- Archaeological Field Services, Inc., 421 South Main Street,
Stillwater, Minnesota 55082. Consultant.

Archaeological Organizations

Plains Anthropologist Corporation
Minnesota Archaeological Society
Dakota Territory Archaeological Society

Archaeological Experience

Owner and Preservator of 21LN2 (The Pedersen Site)

Owner of Part of 21LN1

Curator of Surface Collection from 21LN2 and 21LN1

Donor to Science Museum of Minnesota of excavated artifacts from 21LN2

- 1973 Pedersen Site (21LN2) University of Minnesota Archaeological Field School;
Crew Member.
- 1974 Pedersen Site (21LN2) Macalester College-Hamline University Archaeological Field School;
Crew Member.
- 1975 Pedersen Site (21LN2) Science Museum of Minnesota;
Crew Member.
- 1975 Archaeological Survey of 21LN1, Science Museum of Minnesota;
Crew Member.
- 1976 The Mountain Lake Site, Science Museum of Minnesota;
Crew Member.
- 1977 Archaeological Survey and Salvage of Sites Near Granite Falls, Yellow Medicine County, Minnesota; Minnesota Department of Transportation; The Science Museum of Minnesota;
Crew Member.
- 1978 Archaeological Survey of Lands Adjacent to the Pine River Reservoir; University of Minnesota and St. Paul District Corps of Engineers; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1978 Archaeological Reconnaissance Survey Within Garvin Park, Lyon County, Minnesota; Lyon County Commissioners; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1978 Archaeological Reconnaissance Survey of the Fergus Falls Refuge, Otter Tail County, Minnesota; U.S. Department of the Interior; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1978 Archaeological Reconnaissance Survey of the Loon Lake Wildlife Refuge, Jackson County, Minnesota; U.S. Department of the Interior; Archaeological Field Services, Inc.;
Consultant-Crew Member.

- 1978 Archaeological Reconnaissance Survey of the Sherburne National Wildlife Refuge Water Control Structures Planned for 1978-1979, Sherburne County; U.S. Department of the Interior, U.S. Fish and Wildlife Service; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1978 Archaeological Survey of a Portion of the Maka-Oicu County Park, Nobles County, Minnesota; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1978 Archaeological Reconnaissance Survey of Lake Shaokaton Area, Lincoln County, Minnesota; Independent Investigation; Recorded sites 21LN14 and 21LN15.
- 1978 Archaeological Reconnaissance Survey of Lincoln County Park on Lake Benton, Lincoln County, Minnesota; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1979 Archaeological Reconnaissance Survey of Perch Lake Park, Martin County, Minnesota; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1979 Archaeological Reconnaissance Survey of a Proposed Wastewater Collection and Treatment System at Granada, Martin County, Minnesota; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1979 A Sample Archaeological Reconnaissance Survey of BLM Island and Upland Holdings in the State of Minnesota; U.S. Department of the Interior, Bureau of Land Management; Archaeological Field Services, Inc.;
Consultant, Crew Member.
- 1980 Archaeological Reconnaissance Survey of the Proposed Northern Border Pipeline for the Northern Plains Natural Gas Company - Minnesota/Iowa Sections; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1980 Archaeological Reconnaissance Survey of the Proposed Development Area in Garvin Park, Lyon County, Minnesota; Lyon County Park Commissioners; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1980 Archaeological Reconnaissance Survey of a Proposed Absorption Bed Site at the City of Avoca, Murray County, Minnesota; Archaeological Field Services, Inc.;
Consultant-Crew Member.

- 1980 Archaeological Reconnaissance Survey of a Proposed 8 Acre Wastewater Treatment Plant and One-Half Mile Forcemain at Iona, Murray County, Minnesota; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1980 Archaeological Reconnaissance Survey of a Proposed Wastewater Treatment Facility at the City of Springfield, Brown County, Minnesota; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1981 Archaeological Reconnaissance Survey of the Homme Reservoir at Park River, Walsh County, North Dakota; U.S. Army Corps of Engineers; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1981 Archaeological Reconnaissance Survey of Proposed Sites for Wastewater Treatment Facility on Green Lake, Kandiyohi County, Minnesota; Green Lake Development Corporation; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1981 Archaeological Reconnaissance Survey of Orwell Reservoir at Fergus Falls, Otter Tail County, Minnesota; U.S. Army Corps of Engineers; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1981 Archaeological Deep Test of Selected River Crossings in South Dakota Section of Northern Border Pipeline Right-of-Way; Archaeological Field Services, Inc.;
Consultant-Crew Member.
- 1981 Archaeological Survey of Three Recorded Prehistoric Sites in Northern Border Pipeline Right-of-Way, Hamilin, Coddington and Clark Counties, South Dakota; Northern Border Pipeline Company; Archaeological Field Services, Inc.;
Consultant-Crew Member.

Publications

- 1976 "Art Is Not New in Southwest Minnesota", Voices - April.

Certificate of Merit

- 1975 Science Museum of Minnesota; Named "Exofficio Professor of Archaeology" for services rendered.

VITA

Timothy J. O'Brien
685 Linwood Avenue
St. Paul, Minnesota 55105

Education:

Expected BA Degree
Hamline University
St. Paul, Minnesota
Major: Anthropology

Independent Studies:

1980 On Site Study of Carribean Archaeology, Humacao Puerto Rico.

Field Schools:

1977 Southwest State Field School at a salvage site near Granite Falls, Minnesota (project done under the auspices of the Minnesota Department of Transportation, The Science Museum of Minnesota, and Southwest State University at Marshall, Minnesota);
Student.

Archaeological Field and Laboratory Experience:

- 1978 Archaeological Survey of the City of Brainerd; Water and Light Department, Mississippi River Powerline Crossing; Crow Wing County; Archaeological Field Services, Inc.;
Field Assistant.
- 1978 Archaeological Reconnaissance Survey Within Garvin Park, Lyon County, Minnesota; Archaeological Field Services, Inc.;
Field Assistant.
- 1978 Archaeological Survey of the 90 Acre Dam Construction Site in the Sartell Wildlife Management Area on Little Rock Creek, Benton County, Minnesota; Archaeological Field Services, Inc.;
Field Assistant.

- 1978 Archaeological Reconnaissance Survey of the Loon Lake Wildlife Refuge, Jackson County and the Fergus Falls Refuge, Otter Tail County, Minnesota; U.S. Department of the Interior; Archaeological Field Services, Inc.;
Field Assistant.
- 1978 Archaeological Reconnaissance Survey of Approximately 10 Acres for the Proposed Wastewater Treatment Facilities at Fountain, Fillmore County, Minnesota; Archaeological Field Services, Inc.;
Field Assistant.
- 1978 Archaeological Reconnaissance Survey of the Sherburne National Wildlife Refuge Water Control Structures Planned for 1978-1979; Dikes, Ditches, and Borrow Pits, Sherburne County; U.S. Department of the Interior, U.S. Fish and Wildlife Service; Archaeological Field Services, Inc.;
Field Assistant.
- 1978 Archaeological Reconnaissance Survey of the Proposed U.S. Fish and Wildlife Service Earthen Dike and Water Control Structure in Blakesley Slough Waterfowl production Area on the Pomme de Terre River, Grant County, Minnesota; Archaeological Field Services, Inc.;
Field Assistant.
- 1978 Archaeological Reconnaissance Survey of the Department of Natural Resources' Trails at Washburn Lake, Spider Lake, and Fond du Lac, Cass and Carlton Counties, Minnesota; Archaeological Field Services, Inc.;
Field Assistant.
- 1979 A Cultural Resources Survey of the Proposed Undertakings Within the Chippewa National Forest in Beltrami, Cass and Itasca Counties, Minnesota; U.S. Department of Agriculture, Forest Service; Archaeological Field Services, Inc.;
Field Assistant.
- 1979 Archaeological Reconnaissance Survey of a Portion of the Benson Wetlands (Edwards Site), Stevens County, Minnesota; U.S. Department of the Interior, U.S. Fish and Wildlife Service; Archaeological Field Services, Inc.;
Field Assistant.
- 1979 Archaeological Reconnaissance Survey of a Proposed Wastewater Treatment Facility at Echo, Yellow Medicine County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.;
Field Assistant.

- 1979 Archaeological Reconnaissance Survey of a Proposed Waste-water Treatment Facility at Lester Prairie, McLeod County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.;
Field Assistant.
- 1979 Archaeological Reconnaissance Survey of Perch Lake Park, Martin County, Minnesota; The County of Martin, Minnesota; Archaeological Field Services, Inc.;
Field Assistant.
- 1979 Archaeological Reconnaissance Survey of a Proposed Waste-water Collection and Treatment System at Granada, Martin County, Minnesota; KBM, Inc.; Archaeological Field Services, Inc.;
Field Assistant.
- 1979 An Archaeological Reconnaissance Survey of a Proposed Mechanical Wastewater Treatment Facility Site at Belle Plaine, Scott County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.;
Field Assistant.
- 1979 A Reconnaissance Survey of the Archaeological Sensitive Zones Within the Proposed Mora Airport Expansion Project, Mora, Kanabec County, Minnesota; The City of Mora, Minnesota; Archaeological Field Services, Inc.;
Field Assistant.
- 1979 An Archaeological Field Reconnaissance Survey of the Proposed Wet Bark Trail in the Memorial Hardwood Forest, Houston County, Minnesota; Minnesota Department of Natural Resources, Division of Parks and Recreation; Archaeological Field Services, Inc.;
Field Assistant.
- 1979 An Archaeological Reconnaissance Survey of Proposed Development of the Fritz Loven Park in Lake Shore, Cass County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.;
Field Assistant.
- 1979 An Archaeological Reconnaissance Survey of the Proposed Trunk Highways 610 and 252 Corridors: Anoka and Hennepin Counties, Minnesota; Bather, Ringrose, Wolsfeld, Jarvis, Gardner, Inc.; Archaeological Field Services, Inc.;
Field Assistant.
- 1979 An Archaeological Reconnaissance Survey of Laddie Lake Park in Blaine, Anoka County, Minnesota; The City of Blaine, Minnesota; Archaeological Field Services, Inc.;
Field Assistant.

- 1979 An Archaeological Field Reconnaissance Survey of the Proposed Ash River Trail System, St. Louis County, Minnesota; Minnesota Department of Natural Resources, Division of Parks and Recreation; Archaeological Field Services, Inc.; Field Assistant.
- 1979 A Sample Archaeological Reconnaissance Survey of BLM Island and Upland Holdings in the State of Minnesota; U.S. Department of the Interior, Bureau of Land Management; Archaeological Field Services, Inc.; Field Assistant.
- 1979 An Archaeological Reconnaissance Survey of the Proposed Transmission Line #131 from Arrowhead to Gary, Duluth, St. Louis County, Minnesota; Minnesota Power and Light Company; Archaeological Field Services, Inc.; Field Assistant.
- 1979 An Archaeological Reconnaissance Survey of the Proposed Ortonville Wastewater Treatment Facility, Big Stone County, Minnesota; Ellerbe Associates, Inc.; Archaeological Field Services, Inc.; Field Assistant.
- 1979 An Archaeological Reconnaissance Survey of a Proposed Stabilization Pond (et. al.) for a Wastewater Treatment System at Battle Lake, Otter Tail County, Minnesota; Rieke Carroll Muller Associates, Inc.; Archaeological Field Services, Inc.; Field Assistant.
- 1979 An Archaeological Reconnaissance Survey of a Proposed Wastewater Treatment Site at Madison, Lac Qui Parle County, Minnesota; Bonestroo, Rosene, Anderlik & Associates, Inc.; Archaeological Field Services, Inc.; Field Assistant.
- 1979 An Archaeological Reconnaissance Survey of the Sherburne National Wildlife Refuge Pool #3 Facilities and Five (5) Building Construction Areas; U.S. Department of the Interior, U.S. Fish and Wildlife Service; Archaeological Field Services, Inc.; Field Assistant.
- 1979-1980 Accessioning and Pottery Reconstruction; Hamline University and State Archaeologist's Office.
- 1980 Cultural Resources Investigation of the Upper Minnesota River Subbasin, Southwestern Minnesota and Northeastern South Dakota; Department of the Army, St. Paul District Corps of Engineers; Archaeological Field Services, Inc.; Field Assistant.

- 1980 A Cultural Resources Survey of 579 Acres in Sherburne National Wildlife Refuge, Sherburne County, Minnesota; U.S. Department of the Interior, Fish and Wildlife Service; Archaeological Field Services, Inc.;
Field Assistant.
- 1980 An Archaeological Reconnaissance Survey of the Proposed Savanna Development, Located on Flowage Lake, Aitkin County, Minnesota; Heartland Development Consultants, Inc.; Archaeological Field Services, Inc.;
Field Assistant.
- 1980 Cultural Resources Investigation of the Grand Forks/East Grand Forks Urban Study and East Grand Forks Flood Control Project; U.S. Army Corps of Engineers; Archaeological Field Services, Inc.;
Field Assistant.
- 1980 Archaeological Survey of Proposed Railroad Relocation Sites in Douglas County, Wisconsin, S.P. 6982-03 (I-35), Minnesota Project I 035-6 (171), From Mesaba Avenue to 10th Avenue East, in Duluth, St. Louis County; Department of Transportation; Archaeological Field Services, Inc.;
Field Assistant.
- 1980 Cultural Resource Inventory of BLM-Administered Uplands and Islands in the State of Wisconsin, Contract No. YA-553-CTO-1021; U.S. Department of the Interior, Bureau of Land Management; Archaeological Field Services, Inc.;
Field Assistant.
- 1981 Archaeological Reconnaissance Survey of the Homme Reservoir at Park River, Walsh County, North Dakota; U.S. Army Corps of Engineers; Archaeological Field Services, Inc.;
Field Assistant.
- 1981 Archaeological Reconnaissance Survey of Orwell Reservoir at Fergus Falls, Otter Tail County, Minnesota; U.S. Army Corps of Engineers; Archaeological Field Services, Inc.;
Field Assistant.
- 1981 Archaeological Reconnaissance Survey - 115 kV Silver Bay to Taconite Harbor Line #128; Minnesota Power and Light; Archaeological Field Services, Inc.;
Field Assistant.
- 1981 Archaeological Reconnaissance Survey of the Proposed Marshall Interconnect Project; Northern Natural Gas Company; Archaeological Field Services, Inc.;
Field Assistant.

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